The American Artisan
And Hardware Record

Vol. 52. No. 17. CHICAGO, OCTOBER 27, 1906. $2.00 Per Year.

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COLUMBUS BOLT WORKS,
COLUMBUS, OHIO.
Bolts, Rivets, Nuts, Washers, Carriage Forgings, Etc.
CATALOG AND PRICES ON APPLICATION.

"American Seal"
Elastic Oil Roof Cement
Asbestos Furnace Cement
Stove Putty
Stove Lining
The very best made!
Sold by:
Perkins Roofing & Supply Co., Western Agents,
235 Lake Street, CHICAGO, ILL.
Stockhoff Supply Co., Southwestern Agents,
ST. LOUIS, MO.

TRYING to do business without advertising is like winking at a girl in the dark; you know what you are doing but nobody else does.

THE WIZARD
Adjustable Flexible Hanger.
Prevents Doors from Dragging or Binding

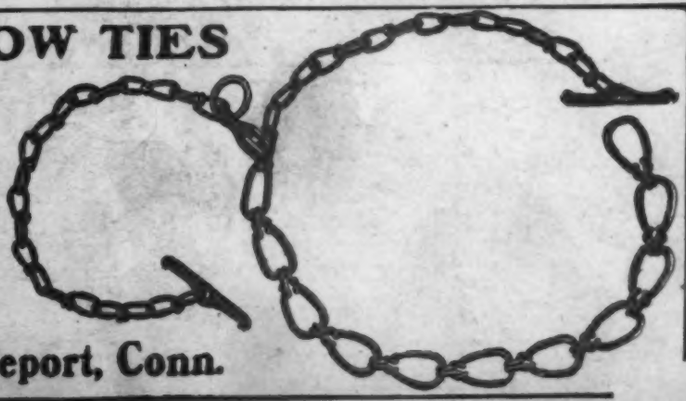
Stronger Than Any Other Flexible Hanger, Easily Adjusted and Runs Smoothly.
Ask your jobber or write us.
Safety Door Hanger Co.
Ashland, Ohio. Hamilton, Ont.

GARLAND NUT & RIVET Co. PITTSBURGH

SMALL RIVETS
FOR ALL PURPOSES
SELECTED MATERIAL
UNIFORMITY
GOOD APPEARANCE
SQUARE CUT-OFF
QUICK SHIPMENTS
SMALL BOLTS AND PUMP CHAIN
GARLAND NUT & RIVET CO.
PITTSBURGH, PA.

We make a specialty of popular priced Enameled Ware, also Stamped and Japanned Tin Ware.
STAR ★ ENAMELING & STAMPING CO.
PITTSBURG, PA.

BROWN WELDLESS COW TIES
Twice as strong as welded chain.
A sample (full length) delivered for **one cent.**
Any Retail Dealer sending postal card request with name of Jobber secures sample prepaid.
Sole Manufacturers
The Bridgeport Chain Co., Bridgeport, Conn.



Features Common to All.

Lift Off Nickel. Lift Out Fire Pots.
Ransom Duplex Grates.
All are Double Heaters. All are Five Flued.

JOSH BILLINGS SAID

"I like that Rooster for the Crow he has and for the Spurs he has to back his Crow."

These are exactly the Reasons why Dealers and their Customers like

CINDERELLA BASE BURNERS

Their Style and Their Heating Power Appeal Alike To All.

All Cinderella Base Burners have Five Heating Flues—Three of these flues heat by direct radiation—Two of them are Double Heating or Circulating flues.

NO HEATING STOVE IS MORE ECONOMICAL.

The nickel plating is all done on Copper—It is Brilliant and Durable.

We Make 3 Distinct Styles and 3 Sizes of Each.

Over 49,000 in actual use.

Our Prices Will Save You Money — None Are High.

IMMEDIATE SHIPMENTS.

STOVE & RANGE CO. OF PITTSBURGH, PA.

Western Agency---W. D. SAGER
38 to 40 Michigan St., Chicago, Ill.

Prompt Shipments!

Yes—we've been working till 10 o'clock every night in our shipping room since Sept. 1st, filling orders for Kelsey Warm Air Generators.

But we made many more Kelseys this year than ever before, because we were bound to make prompt shipments this fall.

If you'll get your orders in, you'll have no excuses to make to your customers about "that Kelsey not being delivered promptly."

If you're not a member, why don't you join the KELSEY KLUB, and get some business started that will bring you good returns next year?

We assist Kelsey Agents in many ways,—We create interest in the Kelsey, refer hundreds of inquiries to them, and help close large, profitable contracts where Kelseys are being specified.

If you want to do a better class of heating work, if you want help that counts, quick shipments—WHY NOT

Send a postal card for our Exclusive Agency Plan.

KELSEY HEATING CO., SYRACUSE, N. Y.

New York City:
156 Fifth Avenue

Western Sales Agents:
COOK & VAN EVERA CO.
38 E. Lake St., Chicago

JAMES SMART MFG. CO., Brockville, Ontario, Sole Makers for Canada

Jewel HEATERS

MADE IN CHICAGO

Steel Construction

Light and **Strong**

Feed Door very large

Ash Pan full width

Central Draft principle

Up to date throughout

We believe we give the best value in the heating stove market.

Made in 4-Sizes

Jewel Steel Ranges

MADE IN CHICAGO

An examination of the

Jewel Steel Range

will convince of its good points.

Customers see them too, and **Jewel** agents profit by it.

George M. Clark & Company Division American Stove Company Chicago

Jewels are all right.

INDUSTRIES ARE OFFERED LOCATIONS

WITH

Satisfactory Inducements,
Favorable Freight Rates,
Good Labor Conditions,
Healthful Communities,

ON THE LINES OF

THE ILLINOIS CENTRAL R. R.

AND THE

YAZOO & MISSISSIPPI VALLEY R. R.

For full information and descriptive pamphlet address

J. C. CLAIR, Industrial Commissioner,
1 Park Row, CHICAGO.

A Wide Awake Dealer

In Michigan, on seeing the sample line of **BORN STEEL RANGES** displayed in the store of another wide awake dealer in another town, was so favorably impressed that he promptly applied for the agency.

Such incidents have occurred so often as to convince us that we are offering exceptional value in our ranges, and that the possibilities for profit in handling the Born Steel Range appeal to all experienced stove dealers.

We invite such dealers to write for our Catalogue and proposition.

The Born Steel Range Co.,

CLEVELAND - - OHIO

THE AMERICAN ARTISAN.

Gentlemen: Please discontinue my ad. I have sold the stock and die. The first issue did the business. Yours truly. E. J. KETCHUM. West Duluth. Minn.

MAGEE *TANK AND LAUNDRY* HEATERS

Under the conditions for which each style is designed the maximum of service is rendered at the minimum expenditure of fuel and care. Detailed information regarding Capacities, Dimensions, and Prices sent upon request.

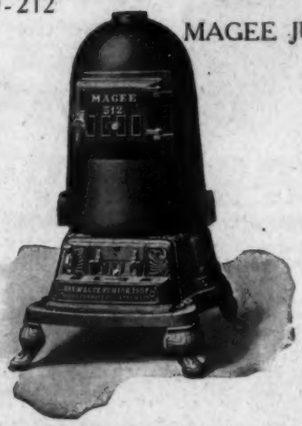
THE MOST EXTENSIVE AND VARIED LINE OF TANK AND LAUNDRY HEATERS MANUFACTURED

SERIES 111-115

MAGEE JUNIOR 210-212

MAGEE JUNIOR 410-412

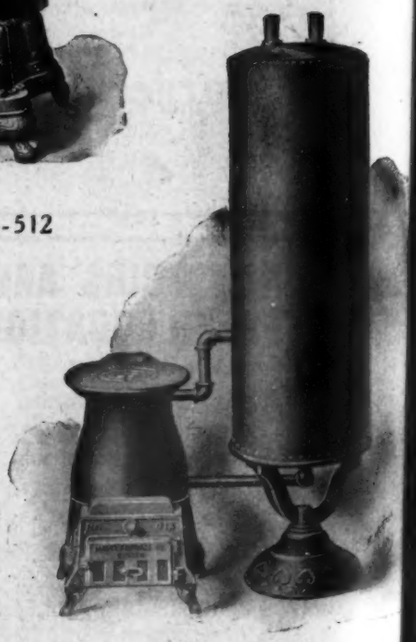
MAGEE JUNIOR 310-312



SERIES 510-512

SERIES 313-315

LAUNDRY RANGE



SERIES 011-015

MAGEE FURNACE COMPANY

38 Union Street, Boston, Massachusetts

LOTT BURTON CO.
86 Lake St., Chicago

E. N. COKEFAIR
39 Cortlandt St., New York

Some Radiant Home Specialties

The LATEST ADDITION to the RADIANT HOME LINE.

The LOWEST PRICED HIGH GRADE TRADE-MARK STEEL RANGE ON THE MARKET.

Key-Plate Top, Lift Broiler Door, Grates Removable Without Disturbing Linings; Thermometer.

Applications for Detail Descriptions, Prices and Agencies Solicited.

Ovens 16 inch, 18 inch and 20 inch. Griddles 8 inch and 9 inch.

The Radiant Home Force Draft Furnace

Fire Pots 22 inch, 24 inch, 26 inch and 28 inch

Original Air Blast Fire Pot, Patented Force Draft Ring.
BURNS Hard Coal, Soft Coal, Coke, Lignite, Wood.
MOST ECONOMICAL, saving fully one-half fuel during season over other makes.

Germer Stove Company

Largest Manufacturers of Strictly High Grade Stoves, Ranges and Furnaces

Main Offices & Foundries, Erie, Pa.

WESTERN BRANCH
231-247 Newberry Ave., Chicago, Ill.

The Stove Specialist is the man who sells the stoves and ranges and makes the big profits in the retail stove business.

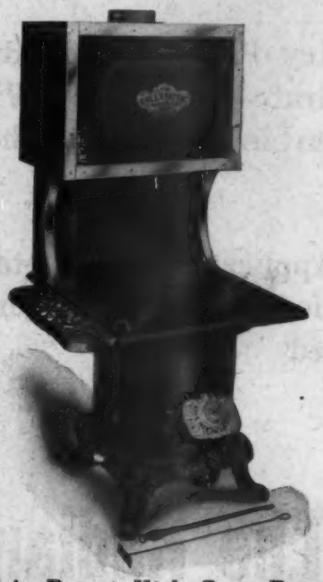
Cole's Original Air Tight Wood Stove has made the name "air tight" famous as applied to wood stoves the world over.

Cole's Coleized Steel Hot Blast Range has 16 special selling features and is the only high grade range specialty in the market to-day.

Push the four original patented specialties which stand out as mile stones in the history of the stove business.

We place the exclusive agency with one dealer in each town. If we are not represented in your town write us for catalogue and prices to-day.

Cole's Original Hot Blast has revolutionized the construction of coal stoves in the United States and Canada



Cole's Patent High Oven Range combines Hot Blast economy and high grade range construction at low price. It is the greatest specialty ever put on the market and is destined to revolutionize the cheap and medium priced range business of the country.

Cole Manufacturing Co.

3218-38 So. Western Avenue, Chicago

Capacity—A STOVE AND A HALF A MINUTE.

The Gold Coin

The Economical Base-burner is the one that while meeting all requirements of beauty, convenience and utility, also furnishes and correctly distributes the highest maximum of heat to the lowest minimum of fuel.

Gold Coin Base-burners have proved their exceeding excellence just as is above indicated, every stove-man knows this and retail buyers learn why with little explanation.

No base-burner is handsomer, richer or more attractive than **The Gold Coin** in its new 20th Century dress, and as a good consistent, reliable and economical worker, everybody who knows stoves knows **it has never been equalled.**

The Ventiduct Stove with a Ventiduct that is a Ventiduct.

CHICAGO STOVE WORKS
Chicago, Ill.

THERE IS NO BETTER WAY

BETWEEN

CHICAGO
INDIANAPOLIS
AND
CINCINNATI

THAN THE

MONON ROUTE

4 TRAINS A DAY 4

Standard and Compartment Sleepers on Night Trains. Parlor and Dining Cars on Day Trains.

CHAS. H. ROCKWELL, Traffic Manager — FRANK J. REED, Gen. Pass. Agt.

CHICAGO

The Royal Quality Range

Quality Higher Than Price

This is a new one and it is right up to the minute in right, new, modern, features of really good steel range making.

There are no "has-beens" in our line.

Features, Wellsville Blue Steel; asbestos lined; anchor plate top; cast encased cast enameled reservoir; pouch feed; sectional fire box linings; duplex removable, reversible grate; extension wood fire box; big strong unwarpable oven.

Made in All Steel Range Combinations.

Quality Stove & Range Co.
Belleville, Ill.

THE NEW

"VICTOR MONARCH" GAS RANGE

Our All Cast Iron Gas Range illustrated herewith contains many new features and latest improvements not to be found in any other range, making it the most desirable fixture on the market for flats, apartments and dwellings.

Guaranteed a Perfect Roaster and Baker

Send for circular.

The Standard Stove & Range Co.

Office and Warehouse 312 First Ave., PITTSBURG, PA.

Everyone Praises the "VICTOR MONARCH" **Prompt Shipments Guaranteed**

WHEN a logger places a wedge in a log and hits it a blow he does not know how much of a split the effort will make, but he does know that if he continues to hit the wedge the log will soon lie in twain. The driving wedge to business is advertising. You cannot expect to make your success with a single ad, no matter how large. Continual rapping does it.

Here's a Snap for Wide-Awake Range Dealers

I am going to sell 1,000 400-lb. six-hole steel ranges, finished in Japan, for not over

$15.00 Each

I'll sell the ranges, too, so you'd better get in line and order now. **These ranges formerly retailed at $60.00 each.** Send me a carload order and get my best cash discount or I'll give dating to firms with satisfactory credit. What better proposition can you ask for, if you have a little capital, are sufficiently enterprising, and want to make money? **Do you know** there is a big demand for the "Willard" Steel Ranges because they give perfect satisfaction, and don't cost too much? Then why don't you supply them?

Willard Steel Ranges Are advertised in many leading publications, and the people know them and want them. Get my prices—it means profit—DOLLARS—to you. Every sale leads to another. I can sell you a better range than you can buy ANYWHERE for the money; one that cooks well and bakes evenly and perfectly, and will last a lifetime, with proper care. **Tell me how many ranges you can sell annually** and I will make you a very interesting proposition. **AGENTS WANTED.**

WM. G. WILLARD, Room No. 28, Willard Bldg., ST. LOUIS, MO.

THE B. RUBY RANGE

Four Hole Type

For Hard Coal, Soft Coal or Wood

Embodies all modern improvements. Has large oven, large reservoir, modern fire box equipment, and large ash pit.

A handsomely ornamented range and a perfect worker.

What is your name and address. If you sell stoves we will send you our latest catalog.

SOUTH ERIE IRON WORKS, SOUTH ERIE, PA.

DO YOU TALK QUALITY

when trying to sell a heating apparatus, or do you strive to get your figure below that of your competitor in order to secure the contract?

IT IS EASIER to sell a high grade furnace or boiler like the MUELLER, in competition with inferior goods, at a higher price, than to sell a heater of the same quality as that figured by your competitor, at the same price, or even less.

40,000 Mueller Heaters in use.

Let us send you our catalog.

L. J. Mueller Furnace Co.

ESTABLISHED 1857

191 Reed Street :: :: MILWAUKEE

VAN'S RANGE

Patent Improved Wrought Steel Portable

For Hotels, Restaurants, Public Institutions, Boarding Houses, and Private Families. All kinds of Hotel Implements for culinary purposes. Manufactured and for sale by

The John Van Range Company

Southwest Corner
5th and Broadway

CINCINNATI, - - - - - OHIO

THE

"BIG FOUR ROUTE"

passes through an interesting Country every mile of the way

CHICAGO TO
INDIANAPOLIS
CINCINNATI
LOUISVILLE
and all points
SOUTH
AND
SOUTHEAST

Buffet Parlor Cars or Dining Cars on day trains, and Pullman's finest Compartment and Standard Sleepers on night trains. All trains run solid, Chicago to Cincinnati. The only line from Chicago connecting in the Central Union Depot, Cincinnati, with C. & O., Q. & C., L. & N. and B. & O. S. W. Rys. For reservations, etc., call on or address

I. P. SPINING, G. N. A.
238 Clark Street - - - CHICAGO

PROGRESSIVE DEALERS

Stanton Upright Steel

Notwithstanding the fact that Manufacturers who are not equipped for making a steel Furnace are using every effort to prevent it, progressive dealers are rapidly getting in line with the fact that STEEL FURNACES when properly constructed are a great improvement over the old cast iron kind.

We are pioneers in the manufacture of Steel Furnaces, and our long experience puts us in position to offer you the best.

Write for prices and description of our full line.

THE STANTON HEATER CO.

MARTINS FERRY, OHIO

SOME MORE BOOKS

A series of practical volumes with numerous illustrations.

"Practical Draughtsman's Work," 226 illustrations. This one contains many points relative to this line of work. $1.00 prepaid.

"Practical Gas Fitting," 120 illustrations. This one contains all practical points connected with gas fitting of every description. $1.00 prepaid.

"Practical Stair Case Joinery," 215 illustrations. This one contains many beneficial points for the practical workman as well as good hints for the amateur. $1.00 prepaid.

"Practical Metal Plate Work," 247 illustrations. This one contains numerous engravings and diagrams, and is unusually clear and true. $1.00 prepaid.

Any of these books and all others of any line can be secured upon receipt of price, prepaid by addressing

DANIEL STERN, 69 Dearborn St., Chicago, Ill.

MONARCH

AIR BLAST FURNACES

FOR SOFT COAL

NIAGARA

FURNACES

FOR HARD COAL AND COKE

IF YOU HAVE NOT RECEIVED OUR CATALOGUE PLEASE SEND FOR IT AT ONCE.

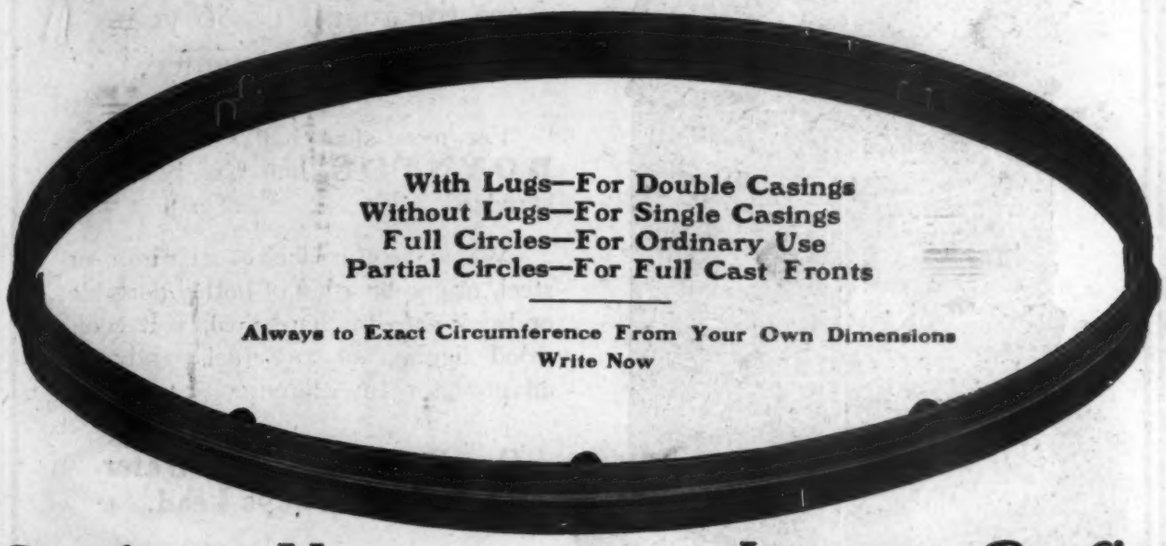
The Forest City Foundry & Mfg. Co.

CLEVELAND, OHIO

STEEL CASING RINGS

Are Made to Conform to Individual Requirements in Every Respect

Never Break — *Circles Perfect*



Ready to Use — *Increase Profits*

THE WALWORTH RUN FOUNDRY CO., 27th St., S. W., Cleveland, O.

Makers of Fine Grey Iron Castings — **Mfrs. of Semi-Steel Registers**

Shaded Sectional Cut

of the

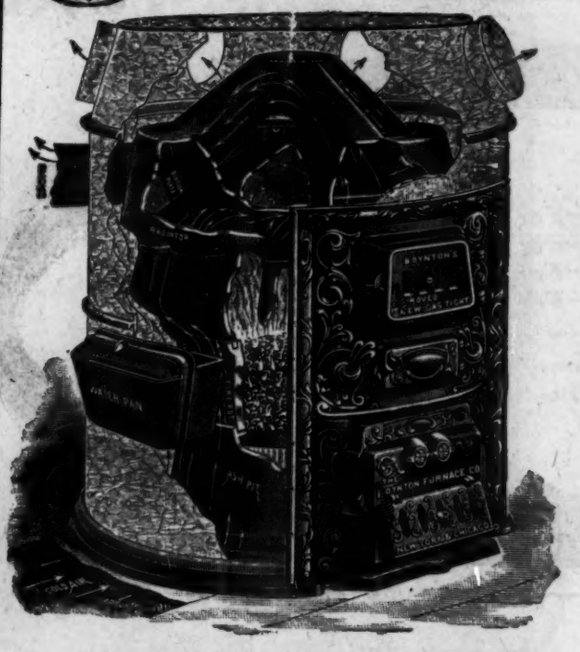
"Low Down" Crown Warm Air Furnace

Designed to show the direction taken by the gases and warm air. Also the thickness and staunchness of its parts.

March-Brownback Stove Co.

POTTSTOWN, PA.

Boynton Warm Air Furnaces, Hot Water Heaters, Steam Boilers



are the result of 56 years practical experience.

For more than half a century the **BOYNTON** line has been the standard.

We make Furnaces of cast iron, or steel, or combination of both—portable or brick set—for hard coal, soft coal, wood lignite, or any fuel, and are adapted for any climate.

Our Steam and Hot Water Heaters Always Lead.

Write for our complete Catalogs.

THE BOYNTON FURNACE COMPANY,

147-149 Lake Street, CHICAGO
207-209 Water St., NEW YORK

THE GILT EDGE RADIUM

has been studied out with a view to **practicability** and **comfort** in every detail.

The air entering at the front in the **Gilt Edge Radium** is controlled so as to give greatest **Uniformity of Heat in the Fire-Pot.**

Greater efficiency cannot be found in any other "Horse-Shoe" Furnace.

See Our Catalogue

R. J. Schwab & Sons Co.

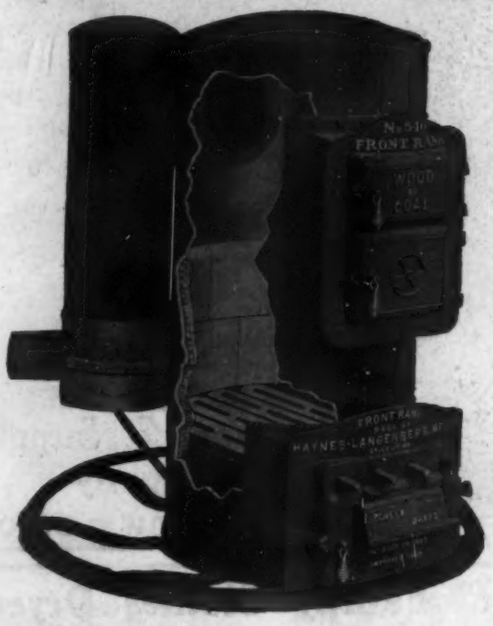
. · THE FURNACE MEN · .
MILWAUKEE, WISCONSIN

From Ogden Johnston & Co., Carbondale, Ill.:

Please take our advertisement out. We have secured results. Your paper certainly reaches the craft. Long may it flourish! 9-5

THIS IS THE PEER FOR THE 20TH YEAR

Burns Hard or Soft Coal and Wood or Coke



Every furnace dealer in every state needs it. Any hot-water combination can be used.

"Front Rank" Steel Furnaces

Get our 1906 Catalogue and read some facts worth reading.

Haynes-Langenberg Mfg. Co.
ST. LOUIS, MO.

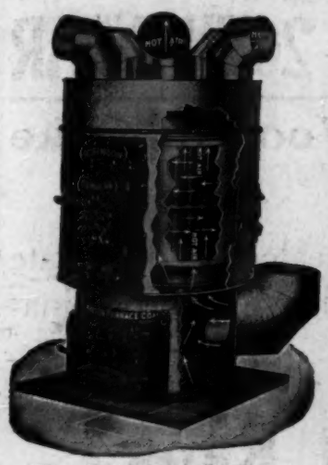
RICHARDSON & BOYNTON CO.

Manufacturers

Warm Air Furnaces
Hot Water and Steam Boilers
Tank and Laundry Heaters

SEND FOR LATEST CATALOGUE

NEW YORK CHICAGO BOSTON



The Robinson Tubular

The Difference in Furnaces

In primary construction the

"ROBINSON"

Tubular is the furnace par excellence.

Why? Because it is the only Tubular Furnace having Direct Draft and Return Flue with long fire travel.

It has a larger heating surface than other furnaces.

And it has a Direct Draft Damper, which, when closed, causes the smoke to divide and make two complete circuits of Radiator around flues before entering exit.

Finally, the Robinson is constructed on correct and thoroughly tested principles, with the single aim of giving the greatest amount of heat from the smallest amount of fuel. Does your coal bill matter?

Our new catalog tells more about it.

Robinson Furnace Co.
Established 1879
107-109 Lake St., CHICAGO

J. F. LEWIS, Cisco, Ill., *writes:*
I cannot get along without THE AMERICAN ARTISAN.

LION FURNACE

Can Use Hard or Soft Coal

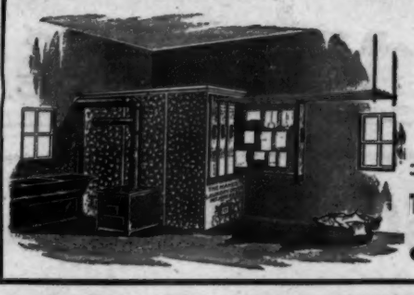
Giving the greatest heat with the least fuel. Pot interchangeable with our Apex furnace. Durable, simple in construction and a fine seller.

Write to-day for Catalogue.

ROOD & INTYRE,
Kansas City, Mo.
Southwestern Distributors.

Youngstown Furnace & Supply Company
YOUNGSTOWN, OHIO

The "Manest" Family Clothes Dryer

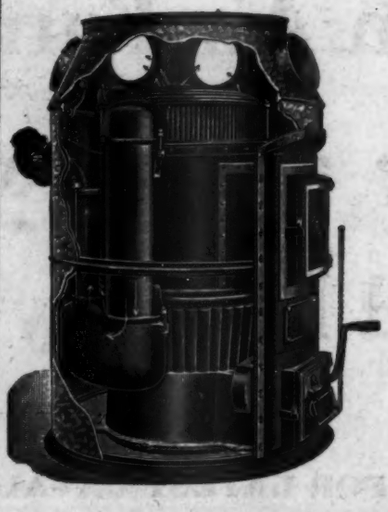


A Laundry Stove and Drying Cabinet Combined.

One fire boils the clothes, dries the clothes and heats the irons. Good profits to agents.

THE MANNEN & ESTERLY COMPANY
Successors to MANNEN & ESTERLY
CLEVELAND, OHIO

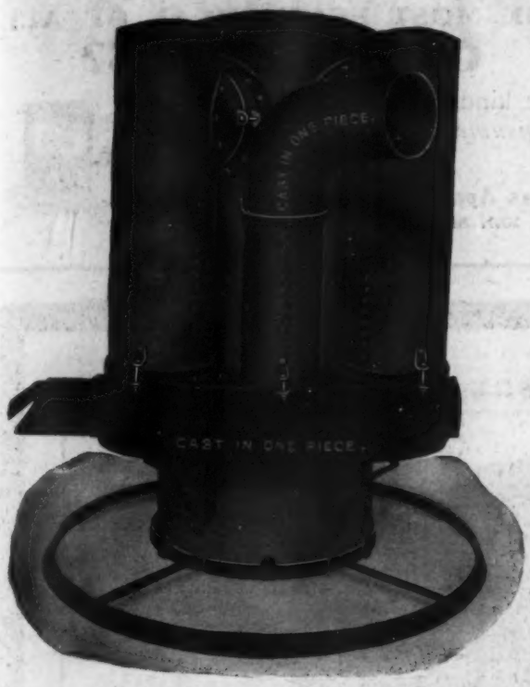
Floral City Furnaces



were designed to meet the demand for a heater that would burn hard coal, soft coal and wood equally well. Some important changes have recently been made and it will be to your advantage to secure our latest catalog.

Tireless care, skilled workmanship and perfect castings unite in making these furnaces reliable.

Monroe Foundry & Furnace Co.
MONROE, - MICHIGAN.



The American Furnace

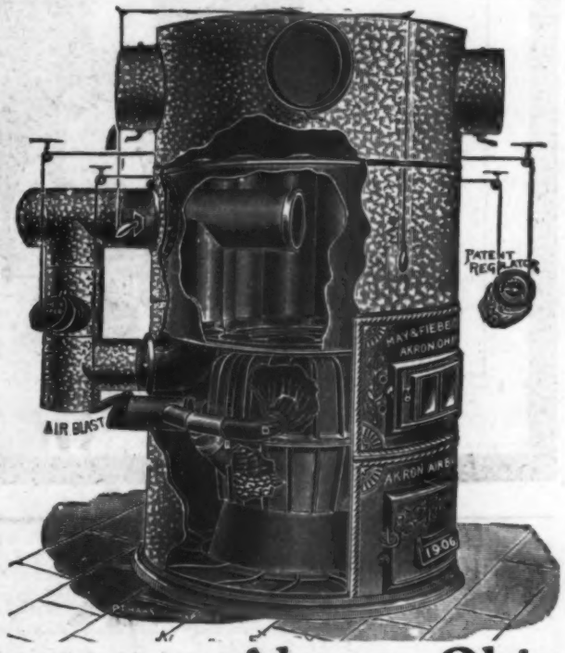
Combines DURABILITY, EFFICIENCY and ECONOMY—while as regards LARGE SALES there is no better furnace on the market

THE AMERICAN FURNACE supplies, correspondingly, considerably more heat with a given amount of fuel than any other furnace.

Write for Particulars

American Furnace Co.,
ST. LOUIS, MO.

THE NEW Akron Air Blast



Is a furnace built on principles which have been tested for sixteen years in thirty different states and countries, demonstrating that the **Akron Air Blast Furnace** is the most powerful, economical, easiest controlled and cleanest heater with any kind of fuel ever placed on the market.

A most interesting 100-page booklet on furnaces will be sent you at request.

MAY & FIEBEGER, Akron, Ohio

CUT THIS OUT

To the Publishers
The American Artisan and Hardware Record
69 Dearborn Street, CHICAGO

Please send us THE AMERICAN ARTISAN each week for three months. At the end of that time we will remit Two Dollars for one year's subscription, or 50 cents in case we decide to discontinue.

NAME .....

ADDRESS .....

TOWN .....

STATE .....

MONCRIEF
Warm Air Furnaces

Combine SIMPLICITY, DURABILITY, ECONOMY and CLEANLINESS IN USE

SPECIALTIES
- All Cast Iron
- Moncrief Duplex Grate
- Large Radiating Surface
- Top Return Flue
- Double Fire Pot
- Large Grate Surface

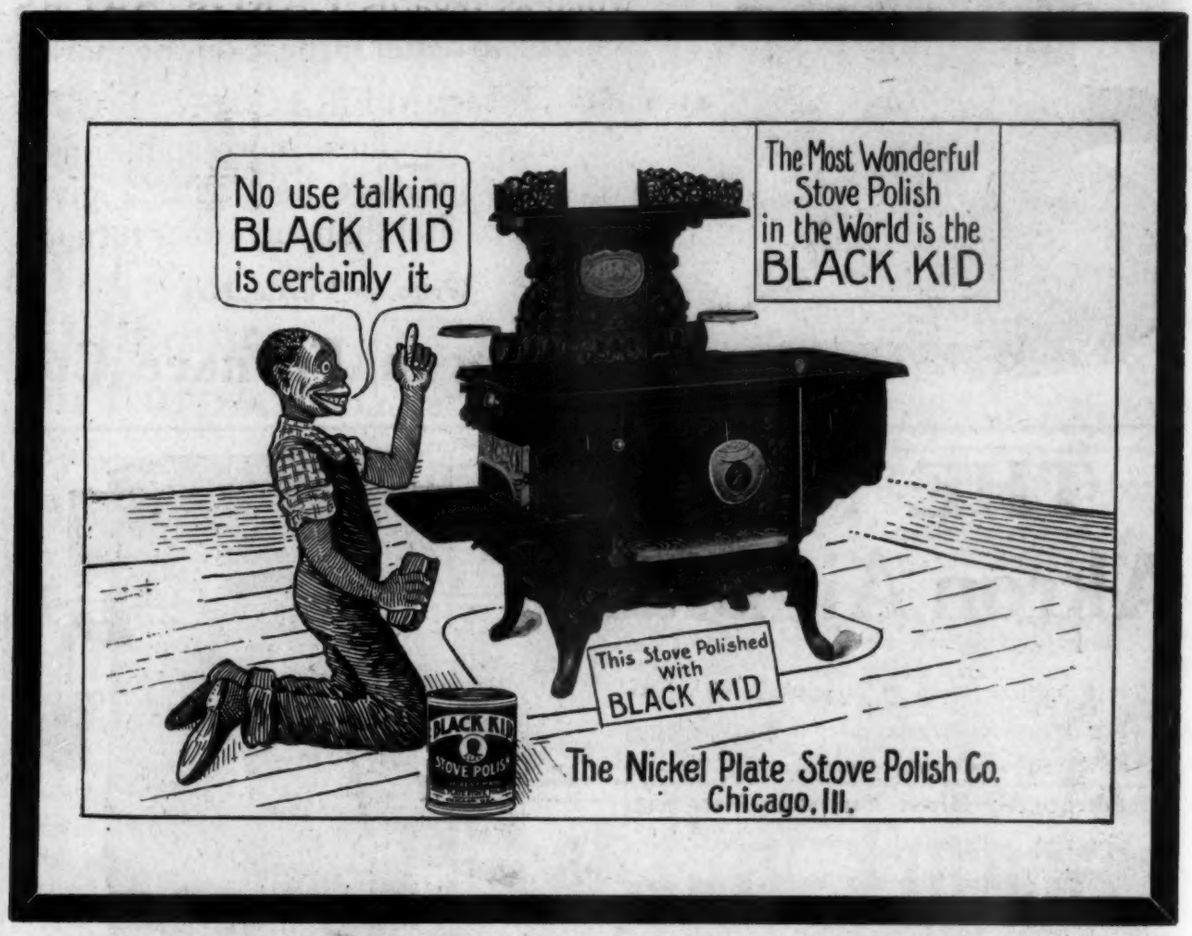
HENRY & SCHEIBLE CO.
6-8-10 Long Street, CLEVELAND, O.

Sales Agent—J. C. KIMMEL, 5314 East 15th Street, Kansas City, Missouri

Why are the ACMES THE MOST ECONOMICAL OF ALL GAS STOVES?

BECAUSE they give not only the best kind of service, but they give it the longest, *at the minimum of gas consumption*, and they give it every day in the year.

H. ADLER CO., Manufacturers of ACME Gas Appliances, CARNEGIE, PA.
WESTERN OFFICE AND WAREHOUSE: 1225 W. 10th St., Kansas City, Mo.



BOOMER FURNACES

Quickly Establish a Local Reputation

It is always a little hard to introduce an old Furnace in New Territory.

But the first BOOMER Furnace you sell will pave the way for an unlimited profitable furnace business.

It is likewise better to take an old, time-tried furnace like the BOOMER, and sell it in new territory, than to continue selling, or endeavoring to sell, a Furnace that does not "stand up" the way you would like to have it.

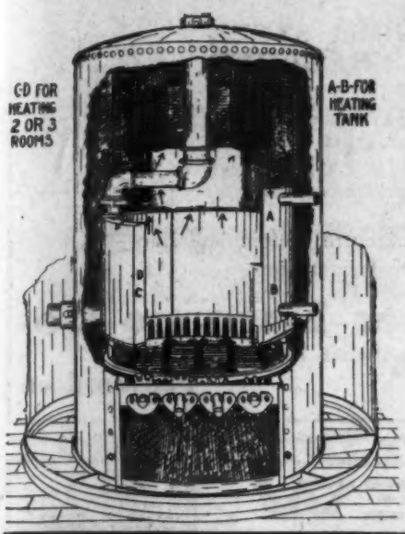
The BOOMER Furnace is one of those always-reliable, sure-to-give-satisfaction commodities that is a genuine pleasure to sell.

The BOOMER Agency, remember, has attractive inducements.

We'll gladly send you our Furnace catalogue upon request.

The HESS-SNYDER COMPANY
Manufacturers MASSILLON, OHIO

EVOLUTION OF THE PERFECT FURNACE



The new and better way of home heating, plainly told and finely illustrated in the new Quaker Catalog No. 20.

It's yours for the asking.

We manufacture complete Heating Plants,

Warm Air and Hot Water

Offices and Exhibit Rooms:
40 Dearborn Street, Chicago, Ill.
Factory: Chicago Heights.

QUAKER MFG. COMPANY

CHAMPION
Hot Water Combination Boilers
"They Fit Any Furnace"

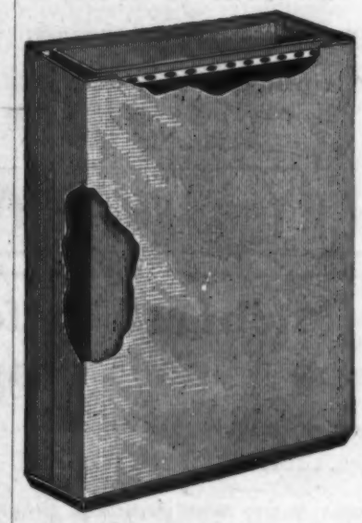
RING SECTION.

(*Furnished tapped for return, as shown in cut, or tapped top and bottom if so ordered.*)

The **Champion** is made with base section and rings, and is thus adjustable, according to the amount of radiation to be used and the height of the furnace dome. The **sections** are connected with heavy threaded nipples, making all joints **absolutely tight.** The **Champion** does the work, no matter what kind of fuel is used. Each boiler is tested to 100 pounds hydraulic capacity before leaving factory and is **guaranteed** not to leak. Made in five sizes diameter. Write for price list.

FRANK D. STOLZ
Manufacturer
156 Webster Ave. CHICAGO

GREEN FURNACE PIPE



Our Double and Single Furnace Pipe and Fittings are easily and quickly put together because they are perfectly made by skilled mechanics. We would suggest that you find out the freight rate on this class of goods from Des Moines to your station and compare it with that from any competing point. We have an immense stock and can always ship your orders promptly. We shall be glad to receive your request for our catalogue and discounts.

Green Foundry & Furnace Works
DES MOINES, IOWA

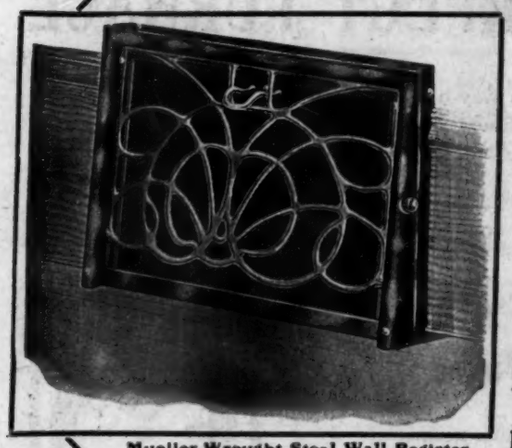
Warmth on the Floor

The Only Floor Warm Register Manufactured

C.H. FOSTER
3403 Bell Ave.
ST. LOUIS, MO.

Maker Largest Line of Wall Registers

Where Successful business men have advertised is pretty safe to advertise.



Mueller Wrought Steel Wall Register

MUELLER

WROUGHT STEEL WALL REGISTER

Handsomest In Design
Lightest In Weight
Absolutely Unbreakable

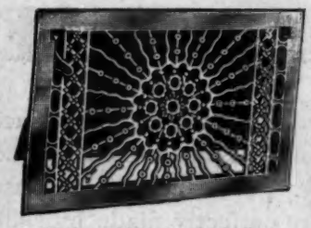
We also manufacture a complete line of semi-steel and cast floor registers.

L. J. Mueller Furnace Co.

Established 1857

191 Reed Street **Milwaukee**

SOMETHING NEW



Horizontal Flamboyant Design. To Be Placed Horizontally

T. & B. WAFER SIDE WALL REGISTER

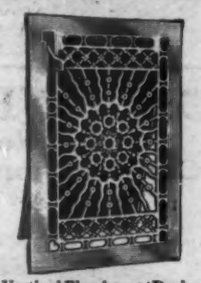
"AS THIN AS A WAFER"—1 inch deep only when closed.

Size of opening
7 x 10
7 x 12
8 x 13
10 x 13
12 x 14

FOR SHALLOW FLUES AND THIN PARTITIONS

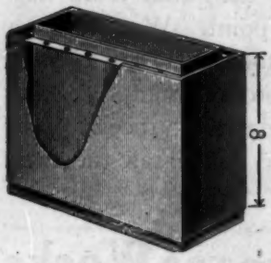
A large stock carried on hand in Black Japanned and Oxydized Copper Plated Finishes.

Size of opening
8 x 10
8 x 12
9 x 12
10 x 12
10 x 14



Vertical Flamboyant Design To Be Placed Vertically

TUTTLE & BAILEY MFG. CO., NEW YORK BOSTON CHICAGO



The Michigan Safety Furnace Pipe Company

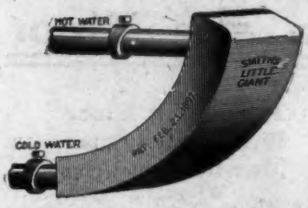
Corner Brooklyn and Abbott Sts.
DETROIT, MICHIGAN

Manufacturers of Safety Wall Pipe, and Single Pipe and Fittings, in both tin and galvanized iron.

Send for our 1906 Catalogue. **Our new factory insures you prompt delivery.**

We belong to no combination. **Don't get our name confused with other manufacturers.**

OUR LITTLE GIANT for Combination Heating



is known to furnace men and plumbers in every State, and is more widely used than any other combination heater made. Along with our Circular Giant and Maltese Heater, it has won its way to the top. Don't try something new, but send for our Catalog.

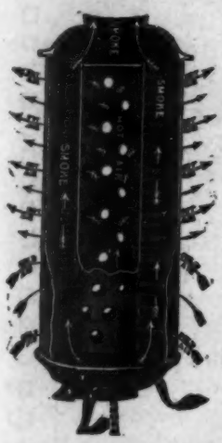
CHARLES SMITH COMPANY, 101 Lake St., CHICAGO

Jesse J. Hensel, Milan, Wis., writes: "I find your publication of such inestimable value in my previous capacity as hardware manager for a large firm located in the western part of this state, that I feel as if I could ill afford to be without it now."

THE SCHWAB SIDE WALL REGISTER

THE SCHWAB SIDE WALL REGISTER AND REGISTER BOX, NEATEST IN DESIGN, NOISELESS IN OPERATION, SUBSTANTIAL IN CONSTRUCTION, A FACTOR IN MODERN METHODS OF HEATING RESIDENCES FULLY ILLUSTRATED IN OUR REGISTER CATALOGUE. SENT FREE ON APPLICATION.

R. J. SCHWAB & SONS CO., The Furnace Men **Milwaukee, Wis.**



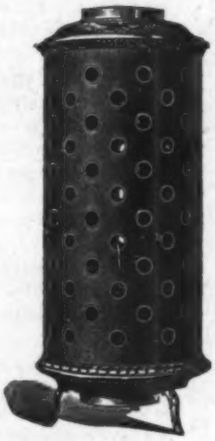
Save ½ Your Fuel

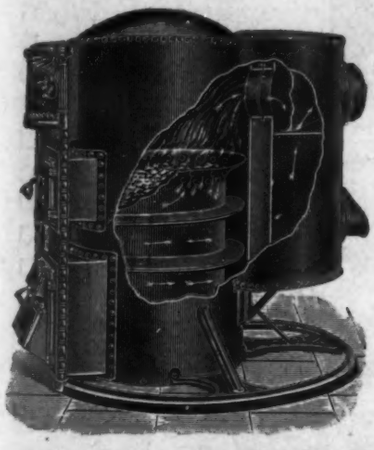
BY USING THE

ROCHESTER RADIATOR

Satisfaction guaranteed or money refunded.
Over 100,000 of them in use.
Fits any stove or furnace.
Price from $2.00 to $12.00.
We make the original and genuine "ROCHESTER RADIATOR."
We do not sell to catalogue houses.
For Hard or Soft Coal, Wood or Gas.
We refer all inquiries, to you from your town, when you carry a stock of our Radiators.
We guarantee our radiators not to interfere with or choke the draught, they are easily cleaned.
One square inch of radiating surface directly over the hot current is better than six in a drum, or side heater, with perpendicular tubes.
Write for descriptive catalogue and prices.

ROCHESTER RADIATOR CO., 120 Furnace St., Rochester, N. Y.





"THE WEIR"

Is a heavy, all steel, gas and soot consuming furnace built on scientific principles which have been tested by years of service.

The hottest and most economical furnace on the market. We have a complete line in five styles and twenty-three sizes. Our illustrated catalog will be sent at your request.

MEYER FURNACE CO.

PEORIA, ILLINOIS

We call it the **Handy Furnace Pipe** because it is so **easily fitted.** The handy pipe is made in **scientific** patterns and of the **best material.** We make Square and Round Furnace Pipe, Elbows, Asbestos Pipes and Registers.

Large Stock Constantly on Hand. Prompt Deliveries.

F. MEYER & BRO. CO., Peoria, Ill.

ROUND OAK

STANDARD OF AMERICA

Have you seen the Round Oak Chief Steel Range?
Do you know anything about it?
Could you be interested in a steel range of absolutely the highest quality at a reasonable price?—
One that has proved to be probably the best seller ever put on the market in late years?
Would you be willing to investigate?
Just once?
We would sincerely like to have you.
The chance is what we are asking for.
With that it is up to us to make good.
You must believe that we are in dead earnest in claiming we have a superior range.
You must be interested enough to send for the "book of the range."
Then—if you so elect—we can send a sample.
Then you can see the range—its finish—its fitting.
The workmanship—the material—the many new improvements—then you can judge—and judge right.
We invite the chance—right now.
May we have it?

ESTATE OF

P.D.BECKWITH,

FRED E. LEE, Manager,

Dowagiac, Mich.

MAKERS OF GOOD GOODS ONLY.

"What's that, Doe-wah-jack?"

"Only a Jack-o-lantern, Fritz—some friend of yours trying to scare you. Perhaps the boy you 'licked.'"

"Mein Gracious, Doe-wah-jack! I never made his face look like that."

ESTABLISHED 1880.

THE AMERICAN ARTISAN & HARDWARE RECORD

Representative of the Stove, Tin, Hardware, Heating and Ventilating Interests.

PUBLISHED EVERY SATURDAY.

TERMS OF SUBSCRIPTION IN THE UNITED STATES, THEIR POSSESSIONS AND CANADA, (Invariably in advance): ONE YEAR, POSTAGE PAID, $2.00. IN FOREIGN COUNTRIES EXCEPT CANADA, ONE YEAR, POSTAGE PAID, $4.00.

Address all Letters, communications, and remittances to

DANIEL STERN, PUBLISHER AND PROPRIETOR,

69 DEARBORN STREET, CHICAGO, ILL.

Entered at the Chicago Post Office as Second Class Matter.

THIS PAPER IS A MEMBER OF THE CHICAGO TRADE PRESS ASSOCIATION.

CHICAGO, OCTOBER 27, 1906.

Notice is hereby given that Walter F. Wollensak, *alias* W. F. WALLACE, is no longer in the employ of The American Artisan, and is not authorized to receive or receipt for any money for this journal.

Now is the time to plan attractive window displays for the approaching holiday trade. The forehanded hardware dealer will not wait till the rush begins, for then he will be too busy to do the subject justice. A little time and thought expended for this purpose will be well spent.

THE London Economist states that British capitalists draw an income of $500,000,000 from their foreign investments. During the last fiscal year they paid income tax on $330,300,000, as compared with $195,100,000 twenty years ago. The largest amount is derived from interest on foreign and colonial government securities and the next largest sum from dividends and interest from foreign and colonial concerns.

THE ACTION of the Bank of England on October 19, in raising its rate of discount to 6 per cent, came as a distinct surprise to the speculative markets, and prices of stocks and commodities generally declined, but metals held steady. Copper and tin were especially strong. The Bank of England rate has not gone as high as 6 per cent since 1899 and only four times in the past twenty-five years.

A COMPARISON of the statistics of the American zinc industry at present with those of twenty years ago is eloquent of progress. In 1884-5 the American production of zinc amounted to 40,688 tons; in 1904-5 it had increased to 200,000 tons. The imports of block and sheet zinc in the former fiscal year were 1,758 and 930 tons respectively; in 1904-5 only 342 tons of block were imported and 17 tons of sheet.

Higher Prices Inevitable.

THE rumblings of a demand for higher prices are heard all along the line. The cost of raw material is high in most branches of manufacture, wages are slowly but surely sliding upward, and the manufacturer has to reckon with expenses hitherto unheard of if he wishes to maintain his place in the race. True, the demand for all kinds of manufactured goods was never so great as now, and factories are crowded to their capacity, but with increased and rising cost of labor and material, manufacturers are doing business on a smaller margin of profit than ever before, and so it is not surprising that there are distinct signs of a movement towards higher prices in many important lines of manufacture.

The proceedings at recent meetings of manufacturers' associations all over the country have emphasized this point. Few conventions have adjourned without hearing some argument in favor of higher prices, and there is no mistaking the tendency of the times. If the laborer is worthy of his hire surely the manufacturer is worthy of his profit. In face of strong demand and rising cost increased prices are justified by every law of economics.

In the hardware trade the demand for all kinds of winter goods, especially for stoves, ranges and heaters, and the accessories thereof, is extremely active, most factories being crowded to the limit with orders. The volume of business is far ahead of that reported at a corresponding period in any former year, and manufacturers in many instances are finding difficulty in securing deliveries of raw material. In some cases premiums are being paid for prompt deliveries, in addition to the increased cost of pig iron, steel, copper and other metals.

In view of these facts a higher level of prices for most lines of hardware is expected at an early date. In some lines of builders' hardware, for instance, keen competition and advancing cost of material and labor hae almost eliminated the manufacturer's profit, and it is highly probable that some concerted action towards higher prices for these products will soon be taken by the factories. The situation is complicated as far as the manufacturers of builders' hardware are concerned, by the difficulty experienced in securing supplies of sheets and cold rolled stock, many shipments being delayed, so that the factories are unable to make even reasonably prompt deliveries on their outstanding contracts. Taking one consideration with another, the trend towards higher prices is unmistakable.

Will "Infernal" Prosperity Continue?

IN A recent New York interview Speaker Cannon is reported to have said, in his plain blunt vernacular, that "our infernal prosperity" is to blame for certain conditions of political apathy which had come under his notice. It is not at all likely that Mr. Cannon would seek a surcease of national prosperity, no matter how much he may deprecate its effect upon the body politic at this time. But to the manufacturer, the jobber, and the retailer throughout the country the questions must occasionally arise whether the general prosperity of the past few years is to continue, whether

the public confidence in the future is justified, whether or not our marvelous progress in all things material is to continue unchecked?

These questions interest capital, because enterprise is ever guided by the prospects for the future. They interest or should interest labor, because a present sense of security may have induced a lack of thrift, to be followed by future suffering. They interest every American citizen, in every trade and calling, who is not built on the plan of the ostrich, with its head-hiding habit in times of stress and storm.

With mills and factories all over the country running literally at full blast and manufacturers in nearly all lines overwhelmed with orders, there can be no doubt that "infernal" prosperity is decidedly on tap. There is more employment for labor than ever before and no worthy citizen seeks work in vain.

All the signs of the times point to a continuance of prosperity for the people of the United States. Measured by the test of building and construction, the years 1905 and 1906 have been the greatest in United States history, and judging by contracts already made for structural steel the coming year bids fair to surpass them. As long as this condition exists it spells prosperity, of course, for all branches of the hardware trade.

Unparalleled activity is seen in every department of iron and steel manufacture, in many instances the mills being buried under orders for delivery throughout the next six months. All along the line, from the Mesaba range to the jobber's warehouse, the watchword is "Rush," and there is no let-up in sight.

Perhaps, however, the factor that enters most largely into confident calculations of the continuance of general prosperity is the practical certainty that within the next few years the electrification of the steam railroads must be undertaken. One does not have to be a prophet or the son of a prophet to comprehend the inevitability of this mighty change in motive power. It will employ an immense amount of capital and myriads of men. It opens up a splendid prospect to both capital and labor and will ensure years of profitable employment for both. America is likely to lead the world in taking this great step forward, as it has done in all things electric, and so the chances are that for years to come, unless the unforeseen should happen, our "infernal" prosperity will continue unabated.

Threatening Letters in Strikes.

A FEW days ago a strike was called by union officials at the plant of the Scranton (Pa.) Bolt and Nut Company. Pickets were posted and all the usual union methods were adopted to prevent the owners from operating any department of the works. Then the anonymous letter-writer got busy and the president of the company found in his mail a scrawl threatening his life. The writer coolly informed him that the strike must be settled, of course in favor of the union, or he was a doomed man.

Like many another employer who has been a target for the poisoned shafts of miserable anonymity, the president of the Bolt and Nut Company paid little attention to the threat, and tried to forget it. But the families and friends of employers thus assailed see good cause for worry in such incidents, and every effort should be made to detect and punish the miscreants who perpetrate such anonymous outrages. The Scranton case is but a specimen of many similar occurrences. Sometimes the threatening letter-writers and those who aid and abet them have driven manufacturers to seek new locations, a consummation not always to be wished.

British Duties on Imports.

FOR A country that is universally regarded as devoted to free trade, Great Britain manages to scrape together a respectable sum from customs duties. In the fiscal year, 1905, these duties on imports amounted to the large sum of £33,505,444 or approximately $164,000,000. The British customs duties are levied almost entirely on articles regarded as luxuries which are not produced in the British Isles, in contradistinction to the protective policy of other nations, which tax imports of such articles as are produced at home.

The articles which yield most to the British revenue through the custom-house are, in the order of their productiveness, tobacco, tea, sugar, spirits, and wines. Imports of tobacco in 1905 added over $65,000,000 to the national income. Tea yielded $36,000,000 and to sweeten the cup that cheers duties amounting to $26,000,000 were paid on sugar. Imported spirits of all kinds paid about $17,000,000 duty and imported wines about $10,000,000.

Smuggling in a petty way is still carried on around the British coasts, necessitating a close watch by the customs authorities. There were 3,797 seizures of smuggled goods last year and 2,362 smugglers were fined.

America and the Japanese Trade.

IF American merchants and manufacturers are to enjoy any very great share of the far eastern trade, especially that of Japan, they must be up and doing. The Japanese people enter into most minute and accurate examination of machinery, appliances, and merchandise generally, and this characteristic indicates the importance of sending expert representatives to Japan in order to secure and hold the trade of that country.

Japan is doing its best to expand into a manufacturing country and every effort is being put forth by its government and people to develop its industries so that Japan may become a great manufacturing center for oriental markets. It has been said that the highway of American commerce to the Orient leads through Japan, and American manufacturers will do well to make a careful investigation of Japanese conditions and opportunities.

UNDER the name of "extruded" metal a new form of pressing is reported as having been exhibited at the recent convention of American Railway Master Mechanics. The process in question consists in forcing hot metal through a die, this method allowing the production of many intricate and fancy shapes, as well as of bars and rods with a high degree of strength and tenacity. Architectural moldings, it is said, can also be effectively made by this process.

RANDOM NOTES AND SKETCHES.

Among the woes of every employer of labor may be counted the tendency of the average workman to report late and charge full time. This difficulty is encountered on both sides of the Atlantic, and at a recent meeting of the English Institution of Heating and Lighting Engineers an employer of many men addressed himself to the subject thus:

We were recently struck by the unfailing punctuality of our men according to the time sheets sent in by them. We happened to find out that in one or two cases the men did not arrive at the time stated, so we sent to all our jobs in London, and found that several other men were overcharging their time. It does not take much calculation to see that if 150 or 200 men overcharge six or seven hours a week, the employer is very soon hundreds of pounds out of pocket.

It is not easy to rise every morning at five o'clock and journey across London in order to get to a job in time, and if a man is sometimes late no complaint need be made, but to charge for such time is little short of theft.

We must trust our men for them to trust us, and in my opinion it is a very miserable business to go to a job like a detective to see if the men are at their work.

The word "Chicago" or "New York" can be substituted for "London" in these remarks without affecting their truthfulness and common sense.

* * *

One happy hardware retailer was to be found the other night holding a reception in his store on "das lieber Halsted street, by the West Side" of Chicago. Rejoicing in the name of Jacob Newman, he was as one risen from the dead, a new man in very deed. He had had the distinguished privilege of being reported dead in San Francisco—murdered at that—and his wife had gone as far as Denver with laudable intent to bring his body home. But somebody had blundered, of course a friend, and the report of Newman's supposed assassination, dished up to the weeping wife with all manner of lurid details, simply lacked the important factor of truth. The veracious newspaper which gave publicity to the friend's story of Mr. Newman's death took Friend Bernstein's word for it, and Bernstein supposed that Newman was dead because he failed to keep an appointment with him in San Francisco after the two had breakfasted together.

If the story had read that Mr. Hardware Newman and his friend Bernstein lunched together, or dined together, or supped together, even I—simple, ingenuous, unsuspicious creature that I am—might have suspected that the pair had burned up a few steins, so to speak. But inasmuch as Bernstein's pipe dream of Newman's death followed a San Francisco breakfast, the question arises in my unsophisticated mind, What in the name of the great steel range did they have for breakfast?

* * *

Every once in a while, you may have noticed, some space writer in need of a little ready change takes a peep into the future and gives an imitation of Edward Bellamy in his famous specialty entitled "Looking Backward." It has often occurred to me that these self-appointed seers serve a useful end. Their little prophetic stunts indicate a certain amount of broad-mindedness and may possibly help to breach the wall of conservatism that is eternally opposed to progress. By predicting wondrous changes in the more or less remote future they prepare the public mind to accept novelties as improvements and help to remove the stick-in-the-mud impression that whatever is is right.

I am led to these serious reflections by the perusal of some recent lucubrations of a Chicago writer, which appeared under the modest heading "One Hundred Years Hence," and included some remarks on heating and ventilating, of which more anon. What self-sufficiency there is in such predictions! Just imagine the case of a man a hundred years ago writing in similar vein—and I suppose there were some such. Would he have guessed the invention of the steam engine, of telegraphy, of the electric light, of any of the varied uses of electricity that have metamorphosed civilized life since then? Not a bit of it. He would have meandered ahead dreaming of sublimated stage coaches and improved oil lamps.

And so it is to-day. The dreamer of 1906 is about as likely to be right in his ideas of what is to be in 2006 as he who dreamed a hundred years ago of twentieth century possibilities. But there is one thing sure about them both. Neither could by any possibility verify his predictions. Dead men can't check up their prophetic tales.

* * *

To return to the writer of "One Hundred Years Hence," here is his prediction as to what will happen in the line of heating and ventilating. "The homes of the people," he says, "will be equipped with every imaginable contrivance for health and comfort," for which posterity ought to be duly grateful. "The system which, by means of the thermostat and the ventilating apparatus, with slight attention maintains an even temperature in the office buildings of the present time, no matter what the weather conditions without are, will have been vastly improved upon. As a result heating in winter and cooling in summer will be absolutely automatic."

* * *

Then our prophet proceeds to open up a delightful prospect for the hardware man, for the dishes of our great-great-grandchildren will be of "some unbreakable material"—hardware, of course. "Clothing will be washed by machinery, and dishes also, if indeed such work will not be done in great public laundries and kitchens. But, perhaps, the housewife will prefer to have such cleaning done at home. In that case it may be possible for her at the close of every meal to take the tablecloth by the four corners and empty its contents, made of some unbreakable material, into a chute. Down through this passage the dishes will clatter, subjected the while to streams of hot water and jets of steam, into the basement, where some mechanism will be ready to catch them, dry them, and send them back to the cupboard all clean and shining for the next meal."

Speed the day when our dishes are of hardware and washed by a mechanical Bridget. Oh, that we could live in the next century!

News Siftings

The Peerless Foundry Co., Hamilton, O., manufacturers of high-grade gray iron castings, have contracted for an addition to their foundry, 70 by 154 feet, which will double their capacity.

When looking for stove repairs it will be well to bear in mind the address of the Manufacturers' Stove Repair Co., whose headquarters are at 517-539 Diversey boulevard, Chicago. The company guarantees prompt shipments and solicits trial orders from the trade.

An interesting post card is being sent out by the A. C. Barler Mfg. Company, 104 Lake Street, Chicago, pointing out the merits of the Barler Ideal Heater. The reverse of the post card shows an amusing scene in Holland and also contains a calendar for the ensuing month, the post card being intended for hanging on the wall as a calendar. In writing regarding "The Ideal Heater" kindly mention THE AMERICAN ARTISAN.

Among recent advertising specialties sent out by the Joseph Dixon Crucible Company, of Jersey City, N. J., are neat floral blotters with monthly calendars on the upper side and a quotation from Bishop Coxe: "Flowers are words which even a babe may understand." The October issue of Graphite, published by the Dixon company, contains several valuable technical articles.

A very complete line of stove and range repairs is manufactured and kept in stock by M. Brucker, 325-331 N. Lincoln street, Chicago, who has a branch at 229 N. Wells street. Repairs for all stoves and ranges can be promptly secured from Mr. Brucker, and adjustable stove and range repairs are a specialty of his establishment. He carries a full line of mica, urns, knobs, rods, and stove bolts, and is a jobber of these goods as well as of general repairs.

A very acceptable gift has been prepared for their customers and friends by the J. D. Warren Mfg. Company, of Chicago, whose specialty is hardware shelving. It consists of a boxed copy of the famous "Foolish Dictionary," published in 1905 in Boston. The card and compliments of the Warren company are stamped on the front cover and also on the outside of the paper box, with the sentiment: "A little nonsense now and then is relished by the best of men."

Beauty of design, careful manufacturing, brilliancy of finish and long wear are some of the desirable features claimed for Acme gas stoves and ranges. There is no uncertain sound to the confident assertion made by the manufacturers that the Acme line is unexcelled and represents the highest standard of excellence. A fully descriptive catalogue of these stoves and ranges can be secured by writing to the makers, H. Adler Company, Carnegie, Pa. The western office and warehouse is located at 1225 West 10th street, Kansas City, Mo.

A stove polish that will not dry up or get hard in the can is a thoroughly desirable commodity. It is claimed by the manufacturers of the Black Silk stove polish that their product does not dry out or rust through the can, and that it will keep good until used, even though years may elapse before the can is opened. The manufacturers, the Black Silk Stove Polish Works, Sterling, Ill., assert that they have Black Silk stove polish that is five years old and as moist and good as on the day it was made. They point out the fact that good stove polish will not dry out and invite dealers to order the Black Silk stove polish in quantities.

A new riddle which, it is claimed, will prove a boon to foundrymen is being introduced by the S. Obermeyer Company, of Cincinnati, Chicago, and Pittsburgh, under the name of the Rockwell riddle. The main feature of the Rockwell is that where the rims and liners lap a strip of galvanized iron is bound over them to prevent these joints catching and breaking when coming in contact with other objects. It is said that the new riddle is much stronger and will wear better than any hitherto supplied to the foundry trade. A patent has been applied for, and the Obermeyer company will send descriptive literature on request. When writing, kindly mention THE AMERICAN ARTISAN.

QUALITY RANGE PARTS.

In a neat and comprehensive folder issued by The Quality Stove & Range Co. of Belleville, Ill., is given a very extensive list of parts manufactured by them for their stoves and ranges. Each part is listed and numbered so that they may be ordered with every prospect of being promptly and accurately filled. Nothing is omitted that is required in repairs for their goods and every part is guaranteed to be fully up to the quality of the original piece. Dealers who handle the Quality goods should be in possession of this list, which will be gladly mailed on request. When writing kindly mention THE AMERICAN ARTISAN.

STOVE DEALERS' SUPPLIES.

If you see a man or a group of men looking steadfastly skyward, can you resist the temptation to follow suit? The psychic influence of their example will inevitably compel you to crane your neck and gaze in the popular direction. "Brauer" of 316-318 North Third street, St. Louis, Mo., has correctly sized up this species of human frailty, and in his advertisements he uses a cut showing a group of solid citizens gazing intently into the blue ethereal, or thereabouts. You naturally gaze with them and so are bound to read the Brauer announcement, which says, "If you are looking for the best place to buy stove dealers' supplies, castings, and repairs, with promptest shipments, address 316-318 North Third street, St. Louis, Mo." When following Brauer's advice, kindly mention THE AMERICAN ARTISAN.

DOVER NESTED STOVE PIPE.

Stove pipe that can readily be put together without tools or malleting and that is shipped in convenient nested form, possesses decided advantages over other kinds. Dover patent nested stove pipe is described as "the kind you don't have to hammer" and is ready to

put together when it leaves the factory. The makers are the Reeves Mfg. Company, Canal Dover, Ohio.

The Dover pipe is made in five grades, namely: Smooth steel or common, blue uniform color steel, Woods' cleaned refined iron, Wellsville polished steel, and Woods' patent planished iron. All the rolls of the Dover pipe are wrapped in paper and labeled with sizes. The pipe is shipped with twenty-five joints of one size to the crate and extra strong crates are used. The Dover has a slip-lock joint and can be put together at a moment's notice. When writing the Reeves company, kindly mention THE AMERICAN ARTISAN.

FOREIGN IRON COMING IN.

Conditions of the iron industry have reached such a pass that importations of foreign metal are not only invited, but demanded to keep the wheels of industry humming. Contracts for between 30,000 and 40,000 tons of English and Scotch have been placed and freight room engaged for three cargoes foundry, or 15,000 tons, while upward of 6,000 tons of Scotch iron is coming in small lots by the regular transatlantic lines, says the New York Journal of Commerce. About half of the tonnage under contract is for pipe works and agricultural implement manufacturers who have export contracts for finished material; the other half will go into castings for domestic consumption.

No improvement is being made, apparently, in deliveries of domestic iron on contracts, and difficulties are certain to increase as the winter season advances. Hence larger importations are almost certain. Sales of foreign iron have been made in small lots not only for consumption on the Eastern seaboard, but for shipment to the Pittsburgh and Buffalo districts.

SCHILL'S PRIDE BASE BURNER.

In an earlier issue of THE AMERICAN ARTISAN a detailed description of Schill's Pride hard coal base burner was given, with an exhaustive review of its outlines, exterior beauties and excellences. To the extent possible without the aid of diagram plates the peculiar inner construction was considered and explained. We take occasion now to go into the matter of the inner details in connection with the diagram plates thereof. Plate 1 herewith, a vertical section diagram, shows the manner of hanging the firepot and the formation and location of the magazine. It also shows the shape, comparative size and general location of the ventiduct, with arrows indicating the entry, the course and the outlet of the hot air system. It will be understood that a double heating upper pipe collar thereto provides for conducting the ventiduct heat to an upper apartment. Fig. 2, a horizontal cross section at the upper firepot rim, indicates the location of the ventiduct between the up and down back fire flues. Fig. 3, a horizontal cross section view of the base, shows the large ovaled opening through the base plate through which the ventiduct receives its air supply, the location of the main back heat and smoke flues and the arrows show the course in the base of the products of combustion. The letter B indicates the narrowest limitations of the cold air inlet, and the letter Y the comparative size and location at the point indicated of the back hot air flue or ventiduct. In the base equipment the wide ovaled separation brings the base flue to a capacity equivalent to those of the up and down back main flues and thus forces the hot

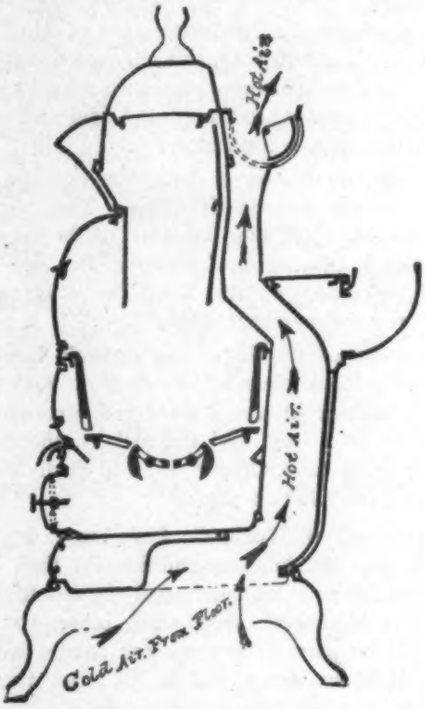


Fig. 1.—Vertical Section.

current against the outer base plates on the one hand, and against the cold air inlet plates on the other hand, and also provides a rounded, natural, frictionless course through the base, for the heat and smoke ele-

Fig. 2.—Horizontal Cross Section.

ments produced by the fire. The construction is an original one in many respects and we are pleased to demonstrate it in the manner indicated. The base burner to which it applies is one of the season's high-

Fig. 3.—Horizontal Cross Section of Base.

class beauties. Excellent large picture and complete data concerning it may be had promptly by addressing the makers, Schill Bros. Co., Crestline, Ohio. Kindly mention THE AMERICAN ARTISAN.

THE AMERICAN ARTISAN AND HARDWARE RECORD is the only publication containing western hardware and metal prices corrected weekly. You will find these on pages 40 to 45 inclusive.

Fire damaged the hardware store of Huff & Co., Bremen, Ind., October 11, and only the prompt action of the local fire department prevented a total loss. The damage was confined to the ground floor and basement and was covered by insurance.

Two sudden deaths of hardware men have been reported within the past few days. They were those of Robert M. Slaymaker, aged 67, of the former firm of Kepler & Slaymaker, Lancaster, Pa., and Charles Howell, aged 76, of Bath, Me. The latter was a retired hardware merchant.

The name of the Lightning portable hand punch tells almost the whole story of this useful and desirable tool. It is made in several sizes with a capacity up to one-fourth inch iron, and the makers, the American Lock Nut Company, Oregon, Ill., will gladly send catalogue and price list on request.

The Niles Tool Works Co. have begun the erection of two large buildings as additions to their plant at Hamilton, Ohio. One building, 65 by 200 feet, will be used as a blacksmith shop. The other, 107 by 170 feet, will be partly one-story and partly two stories high. Both buildings will be of steel frame construction.

The fourth annual entertainment of the Chicago Estimators' Club will be given this evening at the Fine Arts Music Hall, 203 Michigan avenue. The entertainment is tendered to architects, engineers, and contractors. Mr. Arthur Woltersdorf is announced as the speaker of the evening, and a vaudeville program has been arranged.

By an explosion in the hardware department of the Meinerding general store at Ft. Recovery, Mercer county, Ohio, October 17, five persons were killed and fully one hundred injured. Fire followed the explosion and the business center of the little town was wiped out. The accident occurred at noon and is supposed to have been caused by dynamite.

The demand for building hardware in Harrisburg, Pa., is so brisk that the Telegraph of that city quotes a local dealer as saying, "The only way we can get building hardware in time to be put into new buildings is to order the supplies at the time the buildings are begun and then keep them till needed." The conditions in Harrisburg are a fair sample of those existing in many places.

A stump puller that will remove seven-foot stumps without help comes pretty near fulfilling all possible requirements and it is claimed for the Monarch stump puller that it will remove such stumps. The manufacturers, the Monarch Grubber Company, Lone Tree, Iowa, guarantee the Monarch for twelve months and to sustain a strain of 250,000 pounds. An illustrated catalogue is to be had for the asking.

A petition in bankruptcy has been filed against Moses Biltchik, Aaron Biltchik and Nathaniel C. Bloom, partners doing business as the Biltchik Hardware Co. at 135 East Houston street, New York. It was alleged that they are insolvent, made preferential payments of $1,552 to three creditors, and removed merchandise and secreted it in two cellars nearby. The assets are estimated at $10,000. Henry Melville was appointed receiver.

Under the heading "The Man with the Key" the Yale & Towne Mfg. Co., 9 Murray Street, New York, and 90 Lake Street, Chicago, call attention to their Yale master-key locking system, which obviates the necessity of forcing doors or breaking locks in the event of some one's absence or sickness. The system is fully explained in pamphlets entitled "The Key to a Good Thing" and "One Key Enough," which anyone interested is invited to write for. When writing, kindly mention THE AMERICAN ARTISAN.

Acetylene has its own distinctive place in the world of lighting and a reliable generator is, of course, essential to its use. Such a generator, it is claimed, is to be found in the Ideal Epworth Acetylene Generator, "ideal in construction, ideal in light-producing power, ideal in giving out steady light, ideal in selling qualities, ideal in lighting dwellings, stores, hotels, churches and towns." The makers are The Ideal Epworth Acetylene Company, Waterloo, Iowa, who will send circulars entering fully into a description of the qualities of the Ideal generator on request.

Robert Garland of the Garland Nut and Rivet Co., Pittsburgh, Pa., was a member of the executive committee of the American Hardware Manufacturers' Association prior to his promotion to be vice-president. The nominating committee at the recent convention was unable to bring in the name of a candidate to take his place on the committee, as there was no vacancy until after he was elected, so the executive committee met on Saturday and elected D. A. Merriman of the American Steel and Wire Co., Chicago, to fill the vacancy caused by Mr. Garland's promotion.

The Isthmian Canal Commission asks for bids until November 1 for dipper dredge, tubular boilers, smoke boxes, steel stacks, feed pumps, check valves, pipe bends, damper regulators, saw grinders, screw punches, steel rope, lumber, etc. Circular No. 335, containing specifications and proposal forms, can be obtained from D. W. Ross, general purchasing officer, Washington, D. C., or at the assistant purchasing offices in New York, New Orleans, San Francisco, and Tacoma; also from quartermasters at Chicago, St. Louis, Atlanta, and Jeffersonville, Ind.; and the Commercial Club, Mobile, Ala.

A tool that can be sold quickly, profitably and satisfactorily is the right kind of a tool to handle. Such an article, the makers claim, is to be found in the Davis & Cook level, manufactured by Davis & Cook, 23 High street, Watertown, N. Y. Carpenters, masons, machinists, and all who use levels or plumbs, find the Davis & Cook level extremely satisfactory and most mechanics approve of it on inspection. The makers call it "the different level"—with the bulb seen in all positions. This level is for sale by all leading jobbers, and its especial features are fully set forth in a catalogue which will be sent by Davis & Cook on request.

WON WITH PETERS SHELLS.

On Thursday, October 11, at Little Rock, Ark., in the contest for the live bird championship of the state between John H. Pemberton, of Little Rock, and R. W. Larkan, De Vall's Bluff, Mr. Pemberton won, with a score of 24 out of 25 from thirty yards, using Peters factory-loaded shells.

At the tournament of the Little Rock Gun Club, held the same week, the two-men team championship of the state was won by Messrs. B. S. Ricks and F. B. Baptist, both using Peters shells. Mr. C. D. Conrey, also using Peters shells, won second amateur average.

At the Danville, Ill., tournament, October 18 and 19, Mr. H. W. Cadwallader, shooting Peters factory-loaded shells, won second general average, the score being 278 out of 300; on the second day he broke 195 out of 200, including the last fifty straight.

THE HOLT EGG BEATER.

Any kitchen utensil that accomplishes more promptly and more perfectly and satisfactorily than any other the mission for which it is intended is worthy of a place in every home, for the reason that it saves wear and tear on one's nervous system and saves time and money in connection with its more satisfactory results. A little contrivance such as an egg beater is not infrequently the pride of a thorough housewife, and so her neighbors learn about it and must needs have one like it. Anyone who has carefully watched a little wheeled apple parer at work and has looked into its mechanism must respect the little home contrivances for the articles themselves and far more because of the real genius that has brought them into being. Of the same character to this extent is the Holt egg beater and cream whip. It is an ingenious mechanical contrivance as will be observed by an examination of the accompanying illustration. With the turning of the wheel the little beaters spin around merrily and busily, and the perfect whipping process so laborious by old time methods is rapidly and interestingly done so quickly and so perfectly as to be amazing. Any bright hardware man who will take up the little beater and push it by having a tidy girl demonstrate it in the store will bring in the lookers and buyers and make a good thing of it. The device is strong, durable and uncomplicated and will last indefinitely in a well regulated kitchen. It is a tidy little money maker. Made by the Holt-Lyon Co., Tarrytown, N. Y. They make a lot of other like good things. A letter to them will bring literature and prices. Write and kindly mention THE AMERICAN ARTISAN.

DEKKO WALL FINISH.

The Dekko Sanitary Wall Finish, a specialty of the Enterprise Paint Manufacturing Company, of Van Buren and Peoria streets, Chicago, is an article of superior excellence for plain or high class decorative work on walls and ceilings. It is made in colors and white, is a durable cold water wall finish and is absolutely healthful, will not rub off and cannot fade.

This finish covers well and one coat will be generally found sufficient. One pound of Dekko properly mixed and applied covers from 60 to 100 square feet according to the surface. It can be applied to wood, plaster, brick, stone or any solid surface that is dry and not "tacky." It will not settle in the bucket, but will be found to jell soon after being mixed. It will keep in wet condition for several days in good order and will be ready for use by simply stirring. Dekko comes in barrels, kegs and packages. Color samples will be cheerfully sent on application. Please mention THE AMERICAN ARTISAN.

PHILADELPHIA LAWN MOWERS.

Everybody who has enjoyed the delights of pushing a lawn-mower over his own lawn will be interested in the history of the useful machine. Its birthplace is variously claimed, but the false claimants find a Nemesis in W. K. Hawks, a New York veteran lawn mower man, who was interested in the business for two years before any patent on a lawn mower was granted in the United States. According to Mr. Hawks the first patents for lawn mowers were issued in 1869, when three patents were granted for full roller mowers and one for the Philadelphia lawn mower. The latter was constructed with side wheels for driving the rollers, the other three having full rollers for drivers, and for seventeen years all other makers paid the Philadelphia company a royalty for the use of their patents. To-day the Philadelphia Lawn Mower Company, 3101 Chestnut street, Philadelphia, claims to manufacture the standard mower of the world and Philadelphia mowers are used wherever there are lawns to mow. The company has a branch store at 14-16 Scrutton street, Finsbury, London, Eng., and agencies throughout the German empire, with Biernatzki & Co., of Hamburg, as general agents. In France they are represented by Ostheimer Bros., 40 Rue d'Exchequier, Paris, and in Belgium, by G. Deschamps, Brussels.

The complete line of Philadelphia Lawn Mowers includes twenty hand styles and five styles for horse power, and all are handled by jobbers and retailers in this country and the company's numerous agencies abroad. The hand mowers include machines with 6½ inch to 12 inch wheels, and revolving cutters with from three to five blades, while the horse mowers have all the latest improvements.

Mr. Hawks is just as much interested in lawn mowers as in the old days of their infancy and proudly claims premiership for the genuine Philadelphias, for which he is the efficient and successful sales manager.

A large annual catalogue is furnished by the Philadelphia Lawn Mower Co. on application. When writing, kindly mention THE AMERICAN ARTISAN.

AUGUSTE J. CORDIER.

One of Nature's noblemen departed this life last Monday night, October 22, when Auguste J. Cordier, president of the Lalance & Grosjean Manufacturing Co., New York, died at his home in Woodhaven, L. I. He suffered a stroke of apoplexy on the previous Wednesday and never recovered consciousness after the shock, though his death came as a distinct surprise to all his friends, associates and acquaintances. The funeral took place at 2 o'clock Thursday from the Woodhaven residence and the large attendance was a notable expression of the perfect esteem in which Mr. Cordier was held by all who knew him and especially by those who had the privilege of being associated with him in business or of serving him as employes. The

Auguste J. Cordier.
(Born Feb. 27, 1854; died Oct. 22, 1906.)

interment was in Greenwood cemetery, the remains being followed thither by a great concourse of mourning friends. The New York offices of the company at 19 Cliff street and also the branch houses in Chicago and Boston were closed for the day out of respect to the memory of the beloved president.

Auguste J. Cordier was born in the city of New York on February 27, 1854, and had been connected for forty years with the Lalance & Grosjean Manufacturing Co., having worked up from the lowest to the highest position on its staff and having been an important factor in the enameled ware industry for many years. He entered the employ of the company in 1866 as an office boy and by diligence and loyalty in the performance of his duties gained steady promotion. He was made successively entry clerk, city salesman, and traveling salesman, and in the course of time established himself as a universal favorite with his employes, his associates, and his trade. He was a manly man and a conscientious worker, possessing the laudable ambition that joined to sterling qualities makes for success.

In 1889 Mr. Cordier was elected second vice-president of the company and in 1892 he became first vice-president. His election as president followed in 1903, when he became the head of the representative house of his chosen industry. During his forty years with the company Mr. Cordier saw and participated in its wonderful development from a small concern to one employing 3,000 hands and known universally as the manufacturers of the famous Agate nickel-steel ware. The principal factories of the Lalance & Grosjean Mfg. Co. are located at Woodhaven, L. I., where they have an immense plant, and in addition to the large branch houses in Chicago and Boston they operate their own rolling mills at Harrisburg, Pa. The buildings of the home plant cover about sixteen acres, stretching out on one avenue for a distance of 1,180 feet with a uniform depth of 400 feet. The sheet-steel rolling mill at Harrisburg was established in 1895 and occupies twenty acres of ground. Taken altogether, the establishments of the company constitute a mammoth industry.

As head of this great business Mr. Cordier not only gained the respect of all those who came in contact with him but he was beloved by associates and competitors alike. He had a strong personality, but it was of the kind that attracts rather than repels and his personal friends were legion. As a man of liberal thoughts and views he took a deep interest in affairs and his advice in weighty matters was eagerly sought. He was president of the Woodhaven Water Supply Co. and a member of the New York Chamber of Commerce, also of the following clubs: The Union League Club and the Fulton Club of Manhattan, and the Driving Club and Montauk Club of Brooklyn.

Mr. Cordier leaves a widow, a son sixteen years old, and a daughter of seventeen. The family has the sincerest sympathy of all who knew the lamented husband and father, and the trade realizes that it has suffered a distinct loss.

J. GILBERT TAYLOR.

The southern trade particularly will be grieved to learn of the untimely death of J. Gilbert Taylor, who for the past ten years has been one of the popular salesmen of the Supplee Hardware Company of Philadelphia. His death occurred October 21 in the hospital at Sumter, South Carolina, and the funeral took place this week at his old home, Troy, Alabama. Mr. Taylor was the son of John M. Taylor, an employe of the Supplee Hardware Company for many years and highly respected by the trade. The younger Mr. Taylor was only thirty years old at the time of his death and apparently had a bright and promising career before him. He was much beloved by his customers, his trade being especially loyal to him, and much regret has been expressed over his early death.

JOHN R. RIESS.

The trade will learn with deep regret of the death of Mr. John R. Riess, of Sheboygan, Wis. For twenty-five years past Mr. Riess has been connected with the Jacob J. Vollrath Co., of Sheboygan, in the capacity of secretary and treasurer. He died Saturday, October 20, at 2 p. m., following an operation occasioned by appendicitis. The funeral services occurred on Tuesday, October 23, at his home in Sheboygan.

Mr. Riess was 54 years of age at the time of his death. He was prominent in large business affairs in Sheboygan and elsewhere. He was widely known and greatly respected, being held in the highest esteem for honesty, probity and all the good qualities that go to make up a thorough, upright, fair-minded and reliable business man.

NEW STANDARD FLOUR SIFTER.

The New Standard Flour Sifter possesses features of decided novelty. A new construction of the agitator allows of the sifters being very closely nested together without removing the agitator, which is a marked advantage in shipping and storing. It also leaves more room in the sifter, as the agitator does not obstruct. The New Standard is easily kept clean and is

New Standard Sifter.

shipped one dozen in carton, twelve cartons to a crate. The manufacturers are the Roseland Can & Specialty Co. of Rockford, Ill., who will send complete descriptive circulars on request. When writing kindly mention THE AMERICAN ARTISAN.

NEW WINCHESTER HIGH-POWER RIFLE MODEL 1907.

The Winchester Repeating Arms Co., are making a new self-loading rifle, which is known as their Winchester high-power model 1907, and like all creations of a concern of so creditable a reputation, whatever it has to offer will naturally attract much attention both in the arms and ammunition line.

New Winchester High-Power Rifle Model 1907.

The success achieved by the Winchester Model 1905 self-loading rifle, made in .32 and .35 calibers, resulted in many requests for a gun of the same type adapted to a high-power cartridge, suitable for big game hunting. This has led the company to offer the new Winchester High-Power Model 1907. This gun shoots a cartridge of .351 caliber, with 180-grain bullet, having a muzzle velocity of 1,861 feet per second and a penetration of 26⅞-inch pine boards when used with metal patched bullets, and of 13⅞-inch pine boards when used with soft-point bullets. Although this cartridge is quite small in size, it is very powerful in execution and can be highly recommended for use in hunting the largest of game. The gun has the Model 1905 self-loading principle, which is very simple and strong, and has demonstrated its absolute positiveness and durability by about two years' service in the hands of users. The new rifle is very neat and attractive in appearance. It holds six shots, five of which are loaded into the magazine, which is detachable and can be inserted in the gun when the bolt is closed, making it much quicker, safer and handier than those that must be loaded with the bolt open. Extra magazines can be carried, by means of which very rapid and continuous firing can be done. This style of loading won all the competitive prizes at the recent national matches at Sea Girt. The shell is ejected from the side. There are no moving projections on the outside of the gun and no screws to shake loose. The barrel is stationary like that of any ordinary gun and the sights are attached directly to the barrel. It has a simple take-down device, which allows the gun to separate into two portions, the stock and action being in one part and the barrel and receiver in the other, making it very easy to clean. The rifle has a 20-inch nickel steel barrel and a handsome pistol grip stock, and weighs about 7¾ pounds. It will be ready for the market in the early part of December.

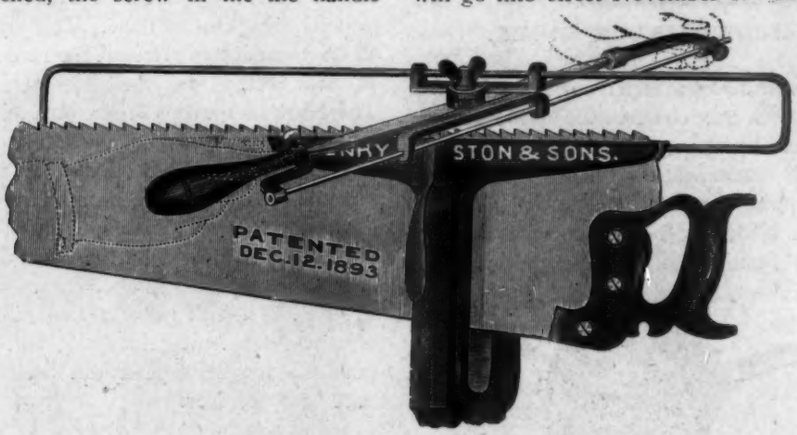
STERLING HACK SAWS.

Some of the cleanest and nicest printed matter that has come to us in some time is that now at hand from the Diamond Saw and Stamping Works of Buffalo, N. Y. It consists of a large four-page circular on carefully chosen lemon-toned paper with most tastefully devised layout of printing in red and black relating to "Sterling" hack saw machines, the reference to which gives evidence of genius in the direction aimed at. It is the kind of trade literature that makes friends at once and induces the recipient to consider the contents carefully and then preserve the medium of communication. Accompanying the pretty circular is also a tasteful catalogue of the company's line of saws and hack saw machines, which is not only nicely printed, but is most comprehensively arranged in all its details. The products of the company are most favorably known in the hardware trade, where their merits have found substantial endorsement in increasing sales.

The literature is, of course, for trade distribution, and requests therefor will have prompt attention. Kindly mention THE AMERICAN ARTISAN.

DISSTON'S SAW FILING GUIDE.

Those who are not skilled in the art of filing a saw correctly will be interested in a mechanical guide especially designed for the assistance of such novices in the art. This saw filing guide, manufactured by Henry Disston & Sons, Inc., Philadelphia, is illustrated herewith, the cut showing a saw and the guide in proper position for filing the first side. There are three marks on the upper hub of the swivel attachment and one mark on the other. One of the three marks shows when it is in position for the first side and another designates when it is in position for filing the other side. The third, or center mark, shows when it is in position for filing rip saws. To obtain the correct position the wing-nut is removed and the guide moved around to the point desired; then the wing-nut is tightened, the screw in the file handle loosened and the file adjusted for the shape of tooth wanted. When one side is filed the saw and attachment are reversed and the other teeth filed. The saw-filing guide is of self-evident practical utility. When writing with reference to it, kindly mention THE AMERICAN ARTISAN.



Disston's Saw Filing Guide.

TARIFF CHANGES IN SPAIN AFFECT HARDWARE.

The new schedule lately come into effect in Spain will, it is feared, almost effectively shut out hardware, household goods, etc., hitherto exported to Spain. The new schedule is designed solely for the protection of home industries. Cash registers, hardware, household and kitchen utensils are subjected to a considerably increased rate of duty. American phonographs, which hitherto paid 8 pesetas silver ($1.30) per kilogram will hereafter pay 10 pesetas gold ($1.93) per kilogram.

THE ELECTROTHERM.

A modern device which marks the highest development in apparatus for applying artificial heat for bodily ailments is the "Electrotherm," a substitute for the hot-water bottle, manufactured by the H. W. Johns-Manville Company of 100 William St., New York City. This device, it is claimed, overcomes the deficiencies of all other methods of local heat application and affords a degree of comfort for the sick not otherwise obtained. It is composed of wires insulated and protected by asbestos woven into a light and flexible sheet or pad, which, when connected to the ordinary incandescent lamp socket, produces a constant and uniform degree of heat. Physicians and nurses appreciate its merits and recommend its use. It is flexible and so constructed as to conform perfectly to any part of the body. It is especially convenient in cases of cold feet, cramps and other local pains. An attractive folder giving full particulars and prices will be furnished on request. When writing kindly mention THE AMERICAN ARTISAN.

ECUADOR'S NEW TARIFF.

The State Department at Washington is in receipt of a new tariff schedule proclaimed by Ecuador which will go into effect November 1. The schedule makes many changes in the existing tariff. It provides for a com, lete reclassification and makes reductions on some classes of goods sent from the United States to Ecuador, but makes no marked alterations on the chief exports from this country to Ecuador.

A reduction of about one cent a pound is made on manufactured steel, iron, brass, bronze, copper and tin. Flour and lard are the chief exports from this country to Ecuador, and on these products there is no change in duty. The American flour trade with Ecuador shows a marked increase. In 1904 it was $159,841, and a year later the total was $279,027. The exports to Ecuador from the United States for 1905 aggregated $1,750,000 and the imports from Ecuador were $2,500,000.

ENTHUSIASM.

Enthusiasm is the fire that makes the human engine go. It is what generates the steam. Without steam an engine is dead. So when a salesman is out of sorts; thinks the weather too hot, too cold, or the days too rainy; imagines because he sold three men last week he shouldn't be called upon to work this week—such a man needs to put fire of enthusiasm under his boilers, for he is dangerously near to the chill of failure. When the fire isn't kept up you know what happens—steam gets low in the gauge—the engine slows down and soon the machinery stops. Enthusiasm is the fire that keeps the salesman moving onward to success. Cultivate it.

RETAIL HARDWARE DOINGS.

NEW FIRMS AND INCORPORATIONS.

Lafayette, Colorado—Lafayette has a new hardware store conducted by Ira D. Redington.

Buffalo, New York—The Meyers Steel Furnace Company. Capital stock $500,000. To manufacture the Meyers patent steel fence posts and rails.

Meriden, Connecticut—The F. W. Doll Mfg. Company, 45½ Pratt street. To manufacture light hardware.

Coleraine, Minnesota—Coleraine Hardware Company incorporated with a capital stock of $25,000.

St. Louis, Missouri—Advance Hardware Manufacturing Company. Capital stock $25,000.

Canyon, Texas—The Johnson-Gray Hardware Company, with a capital of $50,000.

Montgomery, Alabama—The Montgomery Safe and Lock Company. Capital stock $20,000.

St. Louis, Missouri—The Switch Point Lock Company. With capital $50,000 full paid.

Custer, Oklahoma—The Proffitt, Moody & Rhymer Hardware and Implement Company. Capital $6,000.

Owensboro, Kentucky—Guenther Hardware & Mercantile Company has been organized with $16,000 capital stock.

Eufaula, Alabama—Foy Hardware Company with $25,000 capital stock.

Sioux City, Iowa—Sioux City Iron Company. Heavy hardware and iron.

Hinton, Oklahoma—The Simmons Hardware & Implement Company, with capital stock of $20,000.

Helena, Tennessee—Helena Woodenware Manufacturing Company has been organized with $50,000 capital stock.

Spring Valley, Illinois—R. V. Viner, a complete stock of hardware.

BUSINESS CHANGES.

Taylor, Nebraska—J. Rusho has sold his hardware business to W. J. Johnson.

Murray, Iowa—J. F. Cannon has purchased the hardware and implement business of E. M. Critchfield.

Howe, Nebraska—W. H. Lohr has sold his hardware business to C. A. Keel.

St. Paul, Nebraska—S. B. Knudsen has purchased the hardware business of Wm. Mathiesen.

Twin Falls, Idaho—Stothard, West & Halverson have purchased the business of the Minidoka Hardware Company in Twin Falls, Idaho.

Ellston, Iowa—E. W. Daniels has sold his hardware business to A. C. Rauser.

Amoret, Missouri—E. P. Cameron has purchased the hardware business of J. C. Hampton.

Dadeville, Missouri—J. E. Lindley has succeeded to the hardware and implement business of Morris & Lindley.

Steilacom, Washington—J. F. Fowler has purchased the hardware business of the late E. R. Rogers.

Montesano, Washington—McDowell & Phillips have been succeeded in the hardware business by Phillips Brothers. T. J. McDowell will remove to South Tacoma and will engage in the same line.

Springfield, Missouri—J. B. Weaver has succeeded to the hardware business of Weaver & Hayenbusch.

Van Wet, Iowa—Harper & Henry have succeeded to the hardware business of Harper & Thompson.

Kensington, Kansas—L. M. & M. B. Foster have purchased the hardware and furniture business of Allen Sanford.

Afton, Iowa—Bolinger & Nicholson have succeeded to the hardware business of Bolinger & Barnum.

Fair Play, Missouri—W. T. Brown has sold his hardware store to R. Kranz.

Alva, Oklahoma—Wm. McGill & Company have purchased the hardware and furniture business of Powell & Powell.

Formosa, Kansas—J. J. Cooper has succeeded to the hardware business of Cooper & Jacobson.

Miltonvale, Kansas—J. W. Mathews has sold his store to Burbank & Dutton.

Pagosa Spring, Colorado—G. S. Hatcher has purchased the interest of his brother in the hardware business and is now sole proprietor.

Wakita, Oklahoma—F. W. Hipple sold his stock of hardware to P. F. Wright.

Penfield, Illinois—Wm. Ellis sold his interest in the hardware and furniture business of Ellis & Inman to his father, Sam Ellis.

Central Lake, Michigan—The Fisk-Kelly Company, Ltd., has been dissolved, F. R. Kelly retiring from the firm. The hardware firm will be conducted in the future by J. P. and G. M. Fisk under the style of the Fisk Hardware Company.

Manchester, Tennessee—Smith, Tosh & Company, hardware dealers, are succeeded by J. H. Smith & Son.

Pearisburg, Virginia—T. J. Pearson succeeds the Pearisburg Hardware Company.

Savannah, Georgia—Balfour & Cavitt have succeeded Wm. & H. H. Lattimore in the hardware business in this city.

Estherville, Iowa—E. B. Lohr purchased the hardware stock of Rugtiv & Whitmore.

Aurelia, Iowa—H. J. Prisch sold his hardware business this week to J. A. Johnson and J. H. Templemen. The new firm will be known as Johnson & Templemen.

New Siberia, Louisiana—The Erath Hardware Company has changed hands and will be conducted by Messrs. Alexis and A. E. Voorhies.

La Plata, Missouri—N. C. Gilbreath of the firm of Fulmer and Gilbreath, has sold his interest in the hardware store to his partner, G. H. Fulmer.

Stillwater, Oklahoma—F. A. Jones has purchased the grocery and hardware stock of A. L. Hart.

Willmar, Minnesota—O. W. Krona disposed of his interest in the hardware firm of Krona & Johnson to John Falstrom.

MISCELLANEOUS.

Minnesota Lake, Minnesota—The Peter Kremer Hardware Company is erecting a new store building.

Meriden, Iowa—H. Pitcher will open a new store for hardware here.

Sentinel, Oklahoma—The hardware store of A. I. McAlister was damaged in a recent fire.

St. Peter, Minnesota—Ransom & Lindberg's hardware store was burglarized.

Ellendale, North Dakota—Burglars broke into the hardware store of N. H. Bjornstad.

Birmingham, Alabama—Fire destroyed and did serious damage to the Prowell Hardware Company.

Petersburg, Virginia—Burglars broke into the hardware store of Charles Leonard, in Bank street.

Birmingham, Alabama—Wimberly & Thomas Hardware Company has increased its capital stock from $150,000 to $200,000.

Lake Crystal, Minnesota—Thomas & Jones' new hardware store is about completed.

Davenport, Iowa—H. P. Shoemaker is closing out his entire stock of hardware.

Natches, Mississippi—The Baker & McDowell Hardware Company expects to move into its handsome three-story building in Franklin street, about the 1st of November.

Harper, Illinois—Frank Miller has purchased the band hall here for his hardware stock.

Birmingham, Alabama—The hardware store of H. W. Albright was damaged by fire.

Mt. Carmel, Pennsylvania—The Hack Sanner branch hardware store are enlarging their store to accommodate the firm's growing business.

Swanville, Minnesota—Markuson & Kahn have moved their stock of hardware from their old store to their new building just north of the People's Bank.

Rowe, Texas—R. M. Gillis suffered a loss by fire in his hardware store.

Camden, Maine—Blaisdell & Johnston are going to open a hardware store on Bay View street.

Grand Rapids, Wisconsin—The new warehouse of the Central Hardware Company on Grand avenue has been completed, and the stock has been moved into same.

Heating and Ventilating

STANTON FURNACES.

A very neat and interesting booklet tells of the Stanton line of furnaces, which includes the Stanton Seamless, the X-Ray Cast, the Stanton Upright Steel, and the Stanton Natural Gas Furnace. It is claimed for these furnaces that they will stand the test of time and in the booklet just received letters are included from many actual users of the Stanton line, which is manufactured by the Stanton Heater Company of Martin's Ferry, Ohio. A list is also given of schools, churches and public buildings heated by Stanton furnaces in the states of West Virginia, Pennsylvania, Ohio, Virginia, Iowa, Illinois, and Indiana. The Stanton Seamless was placed on the market in the year 1893 and the manufacturers point with pride to the fact that it is no longer an experiment. In writing for literature of the Stanton line kindly mention THE AMERICAN ARTISAN.

THE LITTLE GIANT.

The Little Giant water heater, which is now extensively used in hot air furnaces to provide the water heating combination thereof, is one of the simplest and most effective devices of its kind at the disposal of the furnace trade. It is the invention of Mr. Charles Smith and is duly protected by letters patent. Mr. Smith is one of the clear-sighted, thinking furnace and heating students of the present time, and his altogether successful results in the direction of making real winners of his own practical devices have gained for him a well-deserved prominence. In addition to the "Little Giant" he offers the Circular Giant and the Maltese water heating attachment, both of which have won success for their makers. These lines are made by the Charles Smith Company, 101 Lake street, Chicago. Inquirers please mention THE AMERICAN ARTISAN.

KELLOGG-MACKAY-CAMERON CO.

An invitation is extended to the trade to look in on the new show room of the Kellogg-Mackay-Cameron Company, at the general offices in the "K-M-C" building, at Michigan avenue and Twelfth street, Chicago.

In this very handsome apartment there are exhibited an extensive variety of very tasteful and desirable goods of the company's line, including heating boilers, fire boxes, sectional, round, and all styles of water heaters. Also an exceedingly strong line of radiators for steam and water in all sizes, heights, and shapes and in a variety of rich colored decorations. These, with other features of their manufacture, are thoroughly well arranged for display and also for examination, and the aspect of the entire assortment is most effective and clean. The location on the swellest and most popular boulevard in Chicago, and right in the heart of the business district is a distinctly desirable one and one that it is most convenient to get to.

The company's line is a most complete one in assortment and the many original features included therein are such as will commend themselves to dealers who are interested in such goods.

A very excellent catalogue and other literature will be furnished on application to out-of-town inquirers by addressing as above indicated. In writing, kindly mention THE AMERICAN ARTISAN.

PITTSBURGH FURNACES.

"Intentions mark the difference between things made to sell and things made to serve." With this remark the Stove & Range Company, of Pittsburgh, Pa., introduces its illustrated catalogue of Pittsburgh furnaces for 1907, and they proceed to say that their furnaces are made to serve; that strength and vitality as well as heating qualities are obtained by the purchaser of the Etna, the Tremont, the Gold Medal, or the Dewey. "We send them out equipped for long, faithful careers as guardians to health and comfort," say the makers of the attractive catalogue. "We believe that it pays to devote more care and energy to the making of our furnaces than to the selling of them and that the selling of good goods at popular prices in a large measure takes care of itself. Our orders have made it necessary for us to increase our capacity annually, which we believe proves the soundness of our ideas. When writing for information regarding the Pittsburgh furnaces, or for the new catalogue, kindly mention THE AMERICAN ARTISAN.

THE MONCRIEF FURNACES.

Many years of experience with the Moncrief Furnace assures the manufacturers, Henry & Scheible Company of Cleveland, Ohio, of their success in placing upon the market a very superior and attractive article in the Moncrief Warm Air Furnace. Special care and attention have been paid in its construction to every detail and particular, with a view to perfecting the combination of durability, attractiveness and facility. The manufacturers believe that they have succeeded in producing a very superior furnace and this belief is well supported by the sterling qualities of the Moncrief Furnace.

This company also manufactures a line of specialties including registers of all kinds, wall pipe, furnace pipe, dampers, etc., all of which are set forth in an artistic manner in their catalogue and price list which will be furnished upon application. Mention of THE AMERICAN ARTISAN is requested, when writing.

KELSEY WARM AIR GENERATORS.

In these days of delayed shipments because of unbounded prosperity it is well to know of a factory that prides itself upon being able to deliver its goods promptly. This is one of the points emphasized in recent announcements by the Kelsey Heating Company, of Syracuse, N. Y., whose western sales agents are the Cook & Van Evera Company, 38 East Lake street, Chicago. Since September 1st the Kelsey shipping room has been busy every night until 10 o'clock, filling orders for Kelsey warm air generators. The Kelsey company made many more Kelseys this year

than ever before, anticipating a large demand this fall and with a view to prompt shipments.

The Kelsey agents are organized in what is called the Kelsey Klub and the home company seeks to assist them in every possible way, by creating interest in the Kelsey, by referring inquiries to the agents, and by helping them to close large and profitable contracts where Kelseys are being specified. The exclusive agency plan of the company is explained fully in its literature, which can be secured by dropping a postal card to them. The New York City office is located at 156 Fifth avenue. The James Smart Mfg. Company, of Brockville, Ontario, are sole makers of Kelseys for Canada. When writing, kindly mention THE AMERICAN ARTISAN.

MAGEE TANK HEATERS.

A growing demand for hot water for various uses in private and public buildings, shops and factories, has turned the attention of manufacturers to the question of improving the devices required to heat water. The Magee Furnace Company of Boston, Mass., whose foundries are located at Chelsea, Mass., have applied themselves to perfecting their series of tank and laundry heaters and believe that in the line which they now offer to the trade, they have succeeded in meeting the utmost demands for durability, efficiency, ease of management, and economy of use. Their aim has been to produce not the cheapest but the best, this theory and principle having governed them in all their labors. They confidently offer a complete line of heaters which have been tested to 100 pounds pressure per square inch and should meet every reasonable requirement. The output of the company is backed by nearly half a century of experience in the manufacturing of heating contrivances. A complete illustrated catalogue of the Magee Tank and Laundry Heaters will be sent on application either by the manufacturers or by their general western sales agents, Lott-Burton Company, 86 Lake Street, Chicago. The Magee heaters are adapted for heating large quantities of water, and for general purposes in hotels, apartment-houses, dwellings, conservatories, bath-rooms, laundries, barber-shops, stables, brooder houses, etc. When writing kindly mention THE AMERICAN ARTISAN.

INDEPENDENT SEMI-STEEL REGISTERS.

An exceptionally well made and durable register, and one that has all the advantages of cast iron and of steel combined is the Independent Semi-Steel Register, manufactured by the Independent Register Company of Cleveland, Ohio. The face of this register is of cast iron, artistic in design, perfect in finish, is rigid and has much open area. The bottom is of heavy steel, light in weight, perfect in fit, and non-breakable. This combination gives all the advantages possessed by either all steel or all cast iron registers.

These registers are manufactured in various forms, among them being the Circular Top convex pattern and the Square Convex pattern, both beautiful in design and finish and are operated with the utmost ease. Other registers manufactured by this company are the Independent Deflecting Register in box frame for use in base-boards and the Independent Special Deflecting Wall Register, the latter being made with special view to use of wall pipe of large capacity and is essentially a "first floor" register.

All of the goods manufactured by the Independent Register Company are guaranteed to be of the highest class in workmanship, material, and finish. They will be found by dealers a very attractive line and will be sure to give the utmost satisfaction in every particular. Catalogue and price-list promptly furnished on application. When writing kindly mention THE AMERICAN ARTISAN.

THE BOOMER FURNACE.

The length of time during which the Boomer Furnace has been known to the stove and furnace trade and its steady sale during all that time continuously up to now, indicates some very strong features by which it has sustained a reputation through so many years.

Doubtless the secret of the Boomer's success and its widespread reputation for excellence is due to its peculiarly satisfactorily working features and to the excellence of its manufacture in general. To the dealer who has to do with furnaces, the make that will stand up under all conditions and do the work in a satisfactory manner, is a pretty good proposition to tie to. The Boomer furnaces is one of a class of simple furnaces that the user is not afraid of and it is so thoroughly devoid of complication as to make it most acceptable under all conditions. It is one of those wearing, lasting, reliable, modern heating contrivances, that have stood all tests and is in the market with an increased sale at the present time. Catalogue and full information relating to the Boomer Furnace may be had by addressing, The Hess-Snyder Company, Massillon, Ohio. Kindly mention THE AMERICAN ARTISAN.

PARAGRAPHS.

The Handy furnace pipe, manufactured by F. Meyer & Bro. Company, Peoria, Ill., is so called because of the claim set up by the company and capable of easy verification, that it gives no trouble in fitting. The Handy pipe, say the makers, is made in scientific patterns and of the best material. A large stock is kept constantly on hand and prompt deliveries are guaranteed. The Meyer company make square and round furnace pipe, elbows, asbestos pipes and registers.

The Front Rank is the attractive title of the steel furnace manufactured by the Haynes-Langenberg Mfg. Company, of St. Louis, Mo., and designed to burn either hard or soft coal and wood or coke. Any hot-water combination can be used in the Front Rank, and a test of twenty years of actual use seems to have proved its reliability. The latest catalogue of the Haynes-Langenberg Mfg. Company enters fully into details of the construction of the Front Rank and will be sent on application to anyone interested in the heating problem.

Tinshop

DEVELOPMENT OF A MITER PATTERN.

BY LOUIS OEHRING.

Having had a number of demonstrations on development of shapes pertaining to pipe and kindred articles, I shall in this issue change the subject and try and interest those who may desire to see something published on miter cutting.

In presenting these articles to the reader it is not

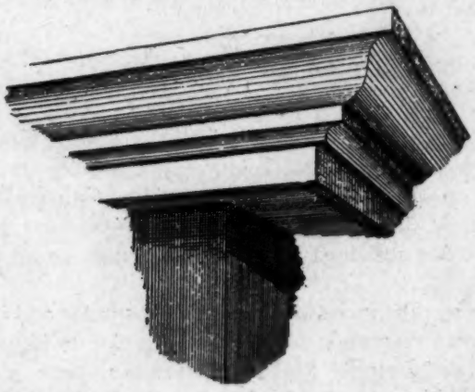


FIG. 1- PERSPECTIVE VIEW OF AN OUTSIDE CORNICE MITER.

my wish to teach those who already know. No doubt there may be some that are prone to criticise this article because they have the opinion that the majority of the journeymen of the sheet metal craft are conversant with this pattern. This article is not written for the benefit of the pattern cutter, for he should know all about this problem. It is written for the benefit of those few who do not know and wish to learn. The intent of the article is also to treat it as a

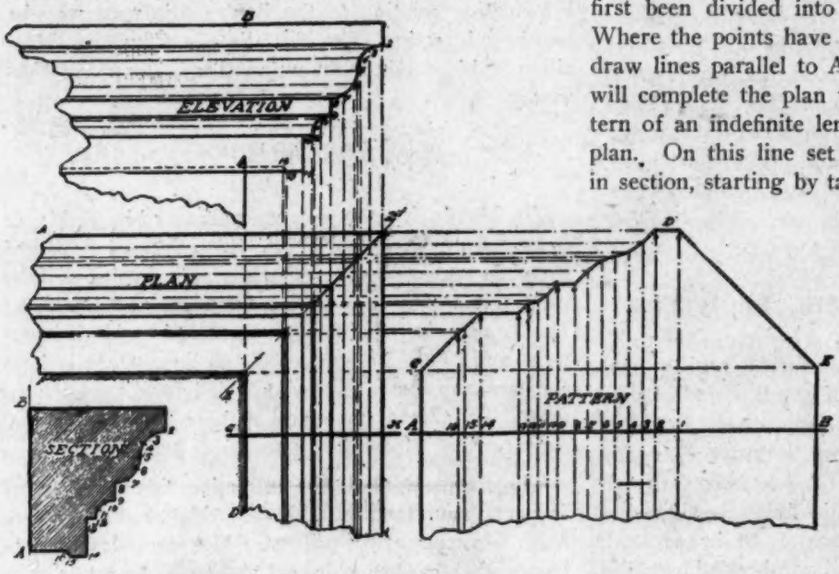


FIG 2- ELEVATION, PLAN, SECTION AND PATTERN OF SQUARE OUTSIDE CORNICE MITER.

problem to bring to the front the underlying principles, which, in my experience, I have found so many are not as well conversant with as they should be, or, again, as a great many think they are.

Miter cutting has for its foundation practical projection drawing. In practice a great deal of the preliminary work necessary in more complicated patterns is dispensed with. For this reason I believe a great many know how to cut this pattern, but still do not know what relation it bears to other patterns.

In Fig. 1 is shown a perspective view of a square outside cornice miter. This is as the miter would appear to the eye after the parts necessary for it have been formed up and soldered together.

In Fig. 2 we have a proper projection or working drawing of the miter shown in Fig. 1. Here is shown the elevation of the piece of molding on the end of which the miter is cut. The outline from A following the numerals to B is the profile of the cornice, and from this we find that profile is often applied to what would technically be a section, which we have here shown, taken on line G H of plan. The plan is here shown by A B C D E F. E F represents the miter line or the line of intersection of the two pieces of molding necessary to make the miter. After the elevation has been drawn the outline of the plan is drawn, then the miter line, and from the elevation are projected to the plan various points as shown, the curve of the profile having first been divided into any number of equal spaces. Where the points have been located on the miter line, draw lines parallel to A B and B C, as shown, which will complete the plan view. Draw line A B of pattern of an indefinite length at right angles to B C of plan. On this line set off the various spaces shown in section, starting by taking the dimension from B to 1 and setting it off as shown, and continue for each space until all the spaces have been transferred. This is called the stretchout of the molding, and represents the molding flattened out. Draw lines through these points parallel to B C, and project the various points from the miter line to the lines of the pattern that are represented there by similar numerals as those appearing in the elevation. Through the points established by the crossing of the lines projected to the pattern draw the curved and broken lines as shown. We have now the completed pattern.

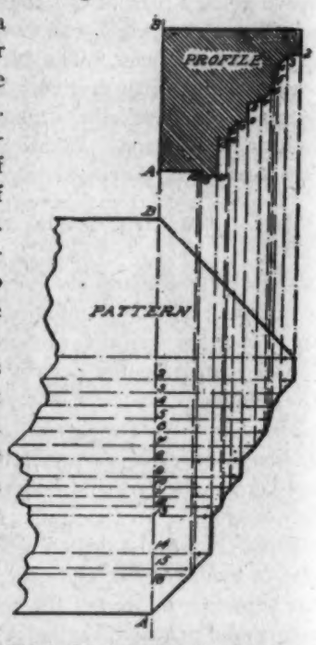


FIG. 3- PATTERN DEVELOPED DIRECT FROM PROFILE.

Now, by examining Fig. 2, it will be seen that line A B of pattern could have been drawn at right angles to A B of plan, and by continuing the operation as be-

fore the same pattern could be obtained; and by so doing it will be found that lines projected from the miter line to the pattern would fall on the same lines as those projected from the elevation to the plan. If that is true, the drawing of the plan is unnecessary to develop the pattern. We can therefore arrive at the same results by developing direct from the profile of the cornice shown in the elevation or from the section, both being the same in shape.

In Fig. 3 is shown how the pattern is developed in practice, either from profile or from the section. The procedure of getting the stretchout is the same as in Fig. 2. The line B A of pattern Fig. 3 is a continuation of line B A of profile. It can also be drawn parallel to it, but never at right angles for a square cornice miter. This shorter method applies only to square miters.

It very often happens that the conditions in the shop will not permit the development of the pattern as shown in Fig. 3. There may be no T-square, the drawing board may not be large enough or the profile of the cornice may be so large that there would be no

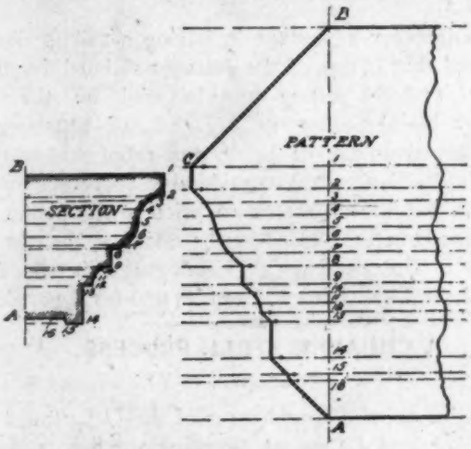


FIG 4 - PATTERN DEVELOPED BY TRANSFERING FROM SECTION WITH DIVIDERS

room for the stretchout on the drawing board. We, therefore, must resort to still another way.

First draw the section as shown in Fig. 4. Divide the curved lines into any number of equal parts. Draw lines from these points to line B A and at right angles to it. Draw line B A of pattern. This can be drawn direct on the material from which the pattern is to be cut. On this line set off the stretchout the same as in Figs. 2 and 3. Through the points on the line B A of pattern draw parallel lines at right angles to it. Now, with dividers or trammels transfer dimensions from section to pattern. Point B will fall on B. Take distance from B to 1 of section and transfer to 1 to C of pattern. The distance from line B A to 2 of section is the same as B 1, therefore the same dimension can be set off from 2 of pattern. Continue this until all the dimensions have been transferred to pattern. Through the points now established draw the irregular outline shown by B C A, and this completes the pattern. The small dots shown on pattern near outline show where pattern is to be prick-marked for bending.

The editor is a man who, as a rule, eschews physical exertion; yet he sometimes enjoys turning a crank—out of the sanctum.

THE POWERS CHIMNEY TOP.

As a remedy for smoky and poor-drawing chimneys Powers Brothers of Streator, Ill., recommend the Powers Automatic Chimney Top and Ventilator as being made on scientific lines. This cover is intended to stop rain, smoke and soot from blowing down the chimney and was used on the principal World's Fair buildings. It has a brace at the bottom of the cover to the center bolt which keeps it in place and prevents it from rubbing on the stack. All the bearing is on a pivot next to the cover, where the weight is, and the wind blowing past the side of the cover and not through it increases the draught. A wire ring under the lug on the center post above the brace prevents the cover from blowing off. When writing to Powers Brothers kindly mention THE AMERICAN ARTISAN.

MALAY STATES TIN.

United States Consul-General D. A. Wilbur of Singapore has sent an interesting report to the state department on the tin production of the Malay states for the first six months of 1906. He says the output of all the tin-bearing states of the Malay peninsula for the first six months of 1905 and 1906, expressed in tons of 2,240 pounds, was 24,940 and 23,985, respectively.

The amount of export duty, in United States currency, was $2,642,333 in 1906 and $2,448,990 in 1905.

The amount of tin exported from the Straits Settlements to the United States in the first seven months of 1903 was 13,671 tons. In 1906 the amount sent to the United States was 8,115 tons.

Shipments of tin direct to the United States have fallen off greatly the past three years. For the first seven months of this year they were 40 per cent less than during the same period in 1903, while the shipments to England increased 33½ per cent. This, says Consul Wilbur, shows a growing tendency on the part of American buyers to purchase what is known as London optional shipments—that is, tin shipped to London, optional rate, by payment of one shilling per ton in addition to the English or continental rate of 27s. 6d. per ton. Goods shipped by this optional rate can be unloaded in England, put in store, held, and shipped to America without extra cost when it suits the sellers' convenience. The rate of freight on tin to New York, via Suez Canal direct, is 20s. or 8s. 6d. less than optional rate per ton.

London, says the consul, controls the tin market, and America consumes 40 per cent of the world's output. As long as the bulk of American purchases are made through or in London the situation will probably remain the same. It would seem advisable for American buyers of tin to break away from London influence and control by purchasing in the peninsula and shipping direct to the United States, thereby saving 8s. 6d. per ton on freight, plus the middleman's profit, at the same time eliminating from the London market the influence of heavy American orders. All orders from London or elsewhere are filled by agents on the spot who buy from the Straits Trading Company, the agent who can pay the highest price securing the product on

an open market. The Straits Trading Company, as the only smelters in the Malay states, have a monopoly of that branch of the business.

NOTES AND QUERIES.

NICKEL-PLATERS AND FOUNDERS.

From J. M. Wolden, Wallingford, Iowa.

Could you give me names of founders in this neighborhood who do nickel-plating?

Ans.—Adams Company, Dubuque, Iowa; S. H. Keller, 110 East Church street, Marion, Ohio.

BANNER LAWN MOWERS.

From The J. C. Lewis Co., Antigo, Wis.

Please inform us who makes the Banner Lawn Mower.

Ans.—Thomas Mfg. Co., Springfield, Ohio.

LAWN MOWER REPAIRS.

From S. Odell, Mapleton, Iowa.

Where can I buy repairs for Standard lawn mowers?

Ans.—Reading Machine Co., Reading, Pa.

HIGH PRESSURE COPPER BOILERS.

From A. E. Heilstedt, La Salle, Ill.

Could you kindly inform us where Randolph & Clowes, manufacturers of high pressure copper boilers, are located?

Ans.—The Randolph-Clowes Co., 36 LaSalle street, Chicago.

ALDINE FIRE PLACES.

From E. C. Saecker, Lake Mills, Wis.

Where and who makes the Aldine Fire Place?

Ans.—Aldine Mantel & Grate Co., Grand Rapids, Mich.

ITEMS.

Cortright metal shingles are achieving popularity in the trade. The manufacturers, the Cortright Metal Roofing Co., of Philadelphia and Chicago, pertinently say: "Cortright shingles make money for tinners and they don't interfere one bit with plain tin roof work."

Important additions have recently been made to the sheet-metal, zinc and copper manufacturing plant of the Friedley-Voshardt Co., 194-204 Mather street, Chicago. They include a new office building 25x48 feet, four stories high, and a four-story factory addition 75x48 feet.

President Edwin L. Seabrook of the National Association of Master Sheet Metal Workers recently visited Pittsburg, Pa., with the result that the local association decided to unite with the National. Louis Tuckhardt is president of the Pittsburg Association and J. B. Goodwin secretary.

All descriptions of tools for sheet metals can be secured through the Niagara Machine & Tool Works, Buffalo, N. Y., the manufacturers of Burritt's roofing double seamers. Among their specialties are tinners' and roofers' tools, shears, punches, presses and dies, and can-making machinery of all kinds.

Quick shipments can be expected on orders sent to the La Crosse Steel Roofing and Corrugating Co., La Crosse, Wis., manufacturers of eaves troughs, conductor pipe, cut-offs, miters, ends and drops, roofings and sidings, steel ceilings, cornices and skylights. A catalogue of the company's products can be had on application.

Samuel Wiltshire, superintendent of the Acme Manufacturing Co., general sheet metal workers, Freeport, Ill., writes significantly as follows, under date of October 19: "THE AMERICAN ARTISAN, Chicago: Please discontinue our advertisement for a tinner. We secured a man before the ink was dry on the paper. We thank you for your courtesy and cannot do more than recommend your paper whenever and wheresoever we can."

Because of the advance in prices of tin plate and pig lead, the American Can Company has made a substantial advance in the prices of practically all its products. The company expects to complete arrangements for the building of a new factory at Newcastle, Pa., in the near future and will advertise for bids. This plant will employ about 1,800 men. The Savannah and New Orleans factories will be completed about January 1.

There is every advantage in having a ceiling dust-proof and that is one of the features claimed for the Lock-Joint metal ceiling manufactured by the S. Keighley Metal Ceiling & Mfg. Co., of Pittsburgh, Pa. The advantage of being dust-proof makes the lock-joint ceiling worth considerably more than the lap-joint, but the difference in price is slight and is more than counterbalanced by the saving in the cost of erecting. The company's "Catalogue D" tells the story of the Lock-Joint and can be had for a postal.

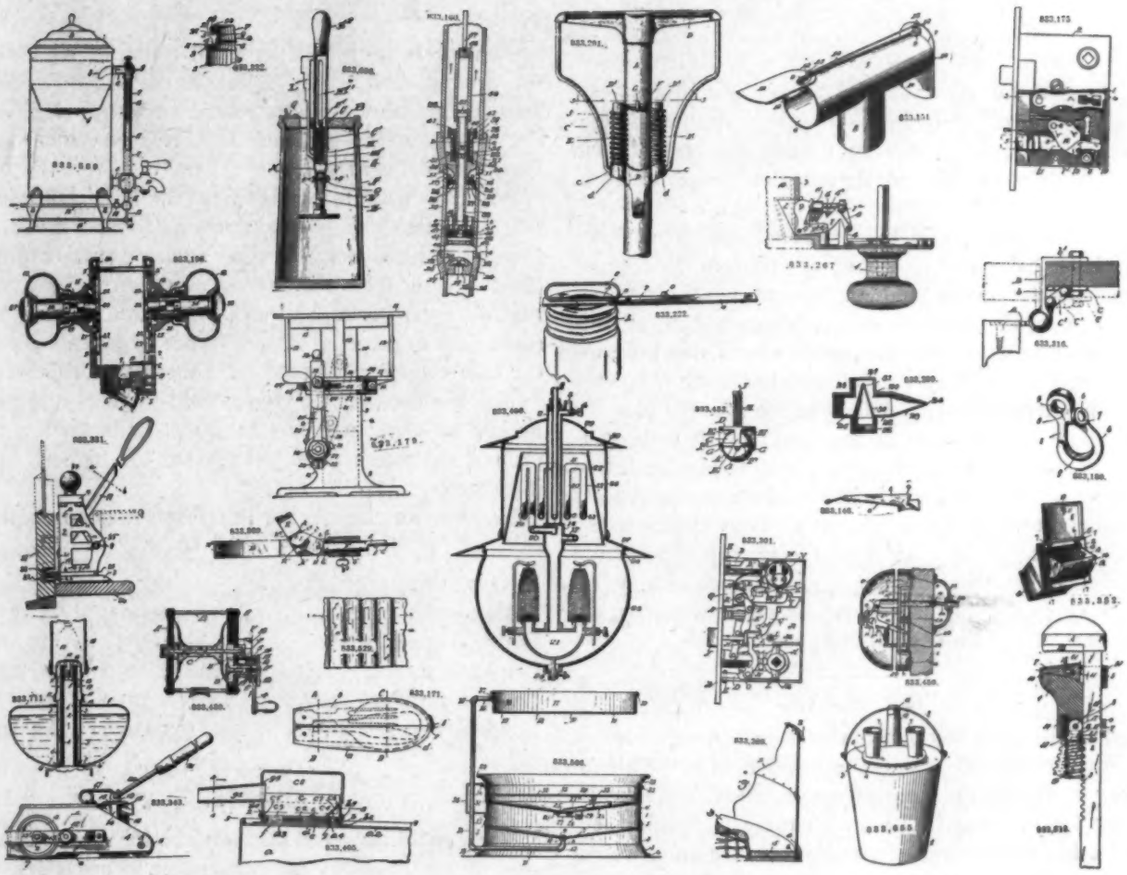
A CHEAPER STEEL PROCESS.

The Bureau of Manufactures of the Department of Commerce and Labor, at Washington, has received word from D. H. Ross, Canadian commercial agent at Melbourne, of the invention of a new process by two Australians for the continuous treatment of iron ore.

The process is called the Heskett-Moore process for directly converting iron ore into malleable iron or steel by a continuous system, and it is claimed that it effects a saving of 25 per cent in manufacture. The ore is simply concentrated by ordinary methods, or if it is magnetic it is separated electrically until the pure oxide of iron is obtained. The oxide of iron is passed through a revolving cylinder heated by waste gases from subsequent operations and brought in that cylinder to a dull red heat. It drops from the cylinder to a second similar cylinder, and in the latter it is brought in contact with the deoxidizing gas, which is forced through and brought into contact with the heated ore. The heated ore is thus converted into pure iron. Accompanied by the deoxidizing gas, it is passed into a third chamber, or melting hearth, where it falls into a bath of molten iron and is converted directly into steel or balled up as malleable iron.

The savings claimed for the process are those of time, labor—the whole process being automatic—fuel and avoidance of flux. The inventors claim that they have discovered a direct method of producing steel from one operation instead of using the blast furnace and converter.

NEW PATENTS.



833,146—Knife-blade Leather Punch. Seymour L. Alvord, Winsted, Conn. Filed Apr. 6, 1906. Serial No. 310,294.

833,151—Smoke-Conductor Chimney Cowl. William R. A. Ball and Robert W. Weaver, St. Thomas, N. D. Filed Apr. 28, 1906. Serial No. 314,318.

833,160—Pump. James Ferries, Pearsall, Tex. Filed Oct. 31, 1905. Serial No. 285,270.

833,171—Pocket Cutlery. Max von Munster, Munich, Germany. Filed Oct. 4, 1905. Serial No. 281,330.

833,175—Lock Mechanism. Paul Papenfoth, New Britain, Conn., assigned to Russell & Erwin Manufacturing Company, New Britain, Conn., a corporation of Connecticut. Filed Aug. 31, 1905. Serial No. 276,526.

833,179—Molding Machine. John T. Rowlands, Racine, Wis. Filed Dec. 8, 1905. Serial No. 290,895.

833,180—Lap Ring. Uranus H. Shadwell, Caldwell, Ohio. Filed Sept. 2, 1905. Serial No. 276,841.

833,198—Lock and Latch Mechanism. Charles J. Caley and Henry G. Voight, New Britain, Conn., assignors to Russell & Erwin Manufacturing Company, New Britain, Conn., a corporation of Connecticut. Filed Sept. 7, 1905. Serial No. 277,292.

832,222—Wrench for Jar Tops. George E. Kimmel, Fairbury, Nebr. Filed Jan. 16, 1906. Serial No. 296,294.

833,267—Latch Mechanism with Automatic Detent. Henry G. Voight, New Britain, Conn., assignor to Russell & Erwin Manufacturing Company, New Britain, Conn., a corporation of Connecticut. Filed July 19, 1905. Serial No. 270,307.

833,288—Tank. Isaac Anderson, McCabe, Ariz. Filed Oct. 24, 1905. Serial No. 284,185.

833,291—Mop Head. Harry Bitner, Berwyn, Ill. Filed Nov. 18, 1905. Serial No. 287,936.

833,299—Oil Burner. Albert C. Butler, Crandall, Tex. Filed Oct. 6, 1905. Serial No. 281,667.

833,316—Hinge. George C. Gardner, Chicago, Ill. Filed Jan. 2, 1906. Serial No. 294,096.

833,331—Window Lift. Clyde Michaelis, Omaha, Nebr. Filed Nov. 24, 1905. Serial No. 288,894.

833,301—Lock. William J. Carroll and Michael J. Mara, New Haven, Conn., assignors to Sargent & Company, New Haven, Conn., a corporation of Connecticut. Filed Sept. 24, 1904. Serial No. 255,773.

833,332—Can Closure. Joseph J. Moser, West Covington, Ky. Filed July 11, 1904. Serial No. 216,005.

833,343—Carpet Sweeper. Orvill H. Sawdy, Iola, Kans. Filed Mar. 15, 1906. Serial No. 306,254.

833,352—Coal Chute. James M. Triggs, Morenci, Mich. Filed May 23, 1906. Serial No. 318,286.

833,400—Method of Producing Gas. Adolph Lang and Harper F. Smith, Philadelphia, Pa., assignors of one-third to Charles H. Zink, Philadelphia, Pa. Filed Nov. 22, 1905. Serial No. 288,599.

833,405—Oil Can. Albert Mangels, Brooklyn, N. Y. Filed Jan. 17, 1906. Serial No. 296,470.

833,430—Fishing Reel. Calvin M. Verrill, Oakland, Cal. Filed Feb. 12, 1906. Serial No. 300,638.

833,450—Door Bell. Frederick L. Ellis, Milldale, Conn. Filed Jan. 25, 1905. Serial No. 242,660.

833,453—Caster. Austin A. Fisher, Allentown, Pa. Filed Sept. 7, 1905. Serial No. 277,350.

833,516—Pipe Wrench. Malcolm G. Ewer, Detroit, Mich. Filed Aug. 23, 1905. Serial No. 275,343.

833,529—Broiler. James J. Jones, New York, N. Y. Filed Jan. 29, 1906. Serial No. 298,460.

833,566—Device for Roasting Meats and the Like. Daniel G. Walker, Lindsay, Nebr. Filed Sept. 26, 1905. Serial No. 280,110.

833,569—Hacksaw Frame. Anton Adamkiewitz, Chicago, Ill. Filed Nov. 8, 1905. Serial No. 286,352.

833,589—Urn. Royal E. Deane, New York, N. Y. Filed Apr. 26, 1905. Serial No. 257,398.

833,655—Milk Pail. Thurston J. Wing, Verbank, N. Y. Filed June 18, 1906. Serial No. 322,295.

833,656—Churn Dasher. Werner E. Wynne, Durant, Miss. Filed July 13, 1906. Serial No. 326,130.

833,711—Lamp Burner for Lighting and Heating Purposes. Gustav Fuchs, Vienna, Austria-Hungary. Filed June 29, 1904. Serial No. 214,620.

Trade Report.

HARDWARE.

Demand for all classes of hardware continues extremely active, but jobbers and dealers continue to experience difficulty in securing prompt shipment of their orders. For this the widely prevalent car shortage is partly responsible.

Recent advances in the prices of raw copper and tin have caused corresponding advances in copper goods and tinware, and an upward tendency is remarked in all lines of metal goods as a natural consequence of the active demand for metals and the inadequacy of the supply. Builders' hardware is in such strong demand in all sections of the country that orders are accumulating in the hands of the manufacturers and foresighted builders are ordering for future delivery. The situation in the hardware trade reflects the unprecedented prosperity of the country, but in the face of stocks that are undergoing rapid deflection dealers generally await supplies with some anxiety, especially as the holiday season approaches with rapid strides. Collections continue good.

TIN PLATE.

The tin plate market continues very firm. An immense amount of business is being booked by all interests, though the canning consumption is practically over for the year. The car shortage is causing considerable annoyance. A sharp advance in prices is looked for in some quarters, but mill prices are unchanged on the basis of $3.75 per box of 100 lbs. for coke tins, 14x20 inches. The London tin plate market is steady at 14s.

Bessemer steel, 107 lbs., 14x20	4.50
Bessemer steel, 100 lbs., 14x20	4.35
Bessemer steel, 95 lbs., 14x20	4.25
Bessemer steel, 90 lbs., 14x20	4.20
Am. charcoal ternes, 8-lb. coating—	
Worcester grades, 14x20, 107 lbs	4.45
Worcester grades, 24x20, 100 lbs	4.30
Worcester grades, 20x28, 200 lbs	8.20
For prompt shipment f. o. b. mills—	
Coke tins, 14x20, I. C	3.90@3.95
Coke tins, 14x20, 100 lbs	3.75@3.80
Coke tins, 14x20, 95 lbs	3.70@3.75
Coke tins, 14x20, 90 lbs	3.65@3.70
Charcoal terne, 20x28, I. C	7.35@7.40
Charcoal terne, 20x28, 200 lbs	7.05@7.10

Usual differences for odd sizes and weights.

COPPER.

In the London copper market standard copper warrants showed a marked reaction early in the week as a result of profit-taking by leading bull operators in that speculative center. The fluctuations of the London market had the effect of unsettling the minds of New York buyers and the New York market was quiet. Exports from New York for the first 23 days of the present month were 11,116 tons. Domestic consumers bought only in small filling-in quantities for prompt and nearby deliveries, most of the new transactions being in electrolytic copper, which was quoted at 23c for spot and 22½c for November and December deliveries.

Possibly owing to reports from the Michigan mines that this year's copper output, owing to labor troubles, internal disturbances, and other minor causes, will not differ greatly from the amount produced in 1905, and that no great increase in lake production is likely for some time to come, a sharp advance of 2 cents per lb. for lake copper was noted on Thursday of this week. Sellers are profiting on copper held by them and quotations on lake copper are 24c to 24½c in car lots for prompt shipment; small lots, ¼c to ½c higher; casting copper, 23¾c to 24¼c.

Extreme fluctuations for this year's London market:

	Highest.	Lowest.
Electrolytic copper, spot	22.00	17.62½
Lake copper, spot	22.50	17.75
Casting copper, spot	21.75	17.50
London, spot	£103 0 0	£76 17 6
London, futures	102 15 0	74 5 0
London, best selection	107 0 0	83 10 0

SHEETS.

The conditions noted last week in the sheet market, particularly the delay experienced in securing deliveries, led to premiums being paid for prompt delivery and a sharp mid-week advance of 50c in black sheets. At the same time galvanized advanced 15c, polished steel sheets 20c and Wood's smooth 15c.

The following prices are for 500-bundle lots and over, f. o. b. mill:

	Black.	Galvanized.	
Gauge.	Net.	Net.	List.
No. 30	2.75	4.05	21
No. 29	2.65	3.80	19
No. 28	2.50	3.55	17
No. 27	2.40	3.35	16
Nos. 25 to 26	2.35	3.15	15
Nos. 22 to 24	2.30	2.95	14

MERCHANT BARS.

There has been a steady, firm market at Pittsburg, with good demand for both iron and steel bars. Large tonnages of bar iron are being negotiated for in Chicago and specifications are up to the full capacity of the mills. Specifications of steel bars are heavy and deliveries slow, $2 premiums being paid for early shipments.

Quotations, f. o. b. Pittsburg, are:

Common bars, 1.60c in car lots, 1.65c, in less than carloads; steel bars, 1.50c; channels, angles, zees and tees, under 3-inch, 1.60c. Differentials on steel: Less than 2,000 pounds, 10c advance; less than 1,000 pounds, of a size, 30c advance.

PIG IRON.

Domestic furnaces having proved unable to supply the continued strong demand for pig iron, many foundry interests were compelled to turn this week to the English and Scotch markets and speculative shipments of foreign metal also began. These imports are expected to continue, the domestic demand being of unparalleled activity. Both northern and southern furnaces raised their prices during the week on spot and prompt deliveries of foundry and forge grades, and but little such iron was obtainable, even at the increased figures.

In New York and the West the call for spot iron and for early delivery is insistent and there is a very great scarcity of iron of desirable brands, some of the furnaces being out of the market entirely.

Substantial premiums are being offered for spot and nearby delivery. Though little foreign iron has actually arrived on this side yet, large orders have been placed in England and Scotland and this metal will soon come in. But foundrymen prefer American iron when they can get it and the importations are not likely to affect domestic prices.

Chicago quotations have moved strongly upward during the week, the entire list having been revised. The quotations are for delivery in the first half of 1907.

CHICAGO QUOTATIONS.

Lake Superior charcoal	$22.00@22.50
Northern Foundry No. 1	22.00@22.50
Northern Foundry No. 2	21.50@22.00
Northern Foundry No. 3	21.00@21.50
Northern Scotch Foundry	22.00@22.50
Ohio Strong Softeners No. 1	22.80@23.30
Ohio Strong Softeners No. 2	22.30@22.80
Southern Foundry No. 1	21.40@21.90
Southern Foundry No. 2	20.90@21.40
Southern Foundry No. 3	20.40@20.90
Southern Foundry No. 4	19.90@20.40
Southern No. 1 Soft	21.40@21.90
Southern No. 2 Soft	20.90@21.40
Southern Gray Forge	19.15@20.15

BIRMINGHAM QUOTATIONS.

No. 1 Foundry	$16.50@17.00
No. 1 Soft	16.50@17.00
No. 2 Foundry	16.00@16.50
No. 2 Soft	16.00@16.50
Gray Forge	14.00@14.50

PITTSBURG QUOTATIONS.

No. 2 Northern	$20.85@21.10
Gray Forge	19.85@20.10
No. 2 Southern	20.60@20.85
Gray Forge Southern	18.60@18.85
Bessemer	21.85@22.10
Basic	21.60@21.85

Rogers, Brown & Co. will say in their weekly report: In spite of the increase in production of pig iron for September, which rate of increase has been continued, there is no let-up in the urgency of the demand for iron for either immediate consumption or on time contracts. If this rate of increase continues during the balance of the year, it will serve very largely to take care of an excessive demand which is having a tendency to make a runaway market, the last thing desired by both producers and consumers. If this increase will have its effect it will result in making the year 1906 the most successful and satisfactory in the history of the iron trade, not only from the point of production and consumption, but also from the point of view of the political economists who point with pride to the long continued stability of the iron market through that period. For almost nine months the market held at a satisfactory level with practically no fluctuation, and the recent advances have only been those absolutely justified by the unusual conditions of abnormal consumption and decreased domestic production.

Locally business is excellent and while the contracts placed for 1906 shipment are less than they have been, on account of the absolute inability of furnaces to care for any additional tonnage for this year, the interest in 1907 business keeps up.

The anticipated trouble in car supply and prompt transportation after loading, is now at hand and has been a large factor in the delay experienced by consumers in getting material ordered. At some points it becomes so bad as to make necessary issuing of orders prohibiting acceptance of any heavy freight for twenty-four hours or longer. This was done by some roads last week and was made necessary by their congested condition. This car trouble manifests itself more strongly perhaps in the coke fields, and in spite of the favorable weather conditions which have held recently movement of coke from the Virginia, Pocahontas and Connellsville fields has all the appearance of regular mid-winter delay.

Coke prices are ruling higher and the supply for anything like nearby shipment is exceedingly limited. Prices on 1907 contracts are high and firm, with the best and more popular brands at a premium over the so-called market.

Matthew Addy & Company will say in their weekly report:

This week has been particularly noticeable because of the demand for foundry iron for quick shipment. Inquiries and sales for next year have been good, but the consumers who want immediate delivery have been most in evidence, and they have furnished most of the excitement. As a matter of fact, the country has in furnace yards no reserve stock of iron at all. To make matters worse, most of the furnaces are behind on shipments of contract iron. Thus belated buyers or consumers who find that they will need more than they originally purchased have not a wide market from which to select. There are of course odd lots here and there, but that is about the extent of the spot supply, and it is not at all adequate for the present emergency. To-day the domestic consumption of iron is greater than ever before in the history of the country. When there was a similar condition of affairs in 1902 an immense quantity of English and German iron was brought over and dumped on the American market. This iron then cost all the way from $18 to possibly $19 f. o. b. Atlantic ports, duty paid. But to-day, while there are great stocks on hand in England, yet the market there and in Germany, too, is active and prices are high, so that relief in that direction is not likely. To-day foreign iron would probably cost, duty paid, to exceed $20.50 f. o. b. Atlantic port, and if there is a serious attempt on the part of America to buy iron abroad this price will likely be sharply advanced. Remembering that railroad freights to point of consumption, and the expense of doing business, must be added to these quotations, it is not probable that much foreign iron can be shipped to interior points, though the stringency in New England and in points along the coast might possibly be relieved by importations.

Coke has been unusually active, and there have been large purchases by furnace interests. Foundry coke has also been sold in considerable quantities.

In Birmingham to-day spot iron cannot be quoted, as every transaction is a law unto itself. For next year from $17 to $17.50 is asked. No. 2 for next year is $20 f. o. b. Ohio furnace, as the supply is limited.

It seems now as if all the iron that the country can produce in the first half of 1907 will be sold before the new year comes. Prices are still going up hill. There is no question whatever in regard to the strength of the market, actually and statistically, and that the whole tendency is toward higher prices.

Current Hardware and Metal Prices.

THE AMERICAN ARTISAN AND HARDWARE RECORD is the only publication containing western hardware and metal prices corrected weekly.

METALS.

FIRST QUALITY BRIGHT PLATES.

		Per Box
IC	14x20	$7 25
IX	14x20	8 25
IXX	14x20	9 48
IXXX	14x20	10 68
IXXXX	14x20	11 88
IC	20x28	14 50
IX	20x28	16 50
IXX	20x28	18 95
IXXX	20x28	21 35
IXXXX	20x28	23 75

COKE PLATES.

Cokes, 180 lbs	IC	20x28	$9 00
Cokes, 200 lbs	IC	20x28	9 35
Cokes, 216 lbs	IC	20x28	9 75
Cokes 270 lbs	IX	20x28	11 70

PIG IRON.

Lake Sup. Charcoal	$22 00@$22 50
North'n Fdy., No. 1	22 00@ 22 50
North'n Fdy., No. 2	21 50@ 22 00
North'n Fdy., No. 3	21 00@ 21 50
Northern Scotch Fdy.	22 00@ 22 50
Ohio Strong Softeners, No. 1	22 80@ 23 30
Ohio Strong Softeners, No. 2	22 30@ 22 80
Southern Fdy., No. 1	21 40@ 21 90
Southern Fdy., No. 2	20 90@ 21 40
Southern Fdy., No. 3	20 40@ 20 90
Southern Fdy., No. 4	19 90@ 20 40
Southern No. 1 Soft	21 40@ 21 90
Southern No. 2 Soft	20 90@ 21 40
Southern Gray Forge	19 15@ 20 15
Southern Mottled	18 90@ 19 90
Southern Silveries, 4 to 6 per cent Silicon	23 40@ 24 40
Jackson Co. Silveries, 8 to 10% Silicon	25 30@ 26 30
Ala. and Geo. Car Wheel	27 15@ 27 65
Malleable Bessemer	22 00@ 22 50
Standard Bessemer	22 80@ 23 80
Basic Iron	20 90@ 21 40

BLACK STEEL SHEETS.

Nos. 11-12 per 100 lbs	$2 5
Nos. 13-14 per 100 lbs	2 5
Nos. 15-16 per 100 lbs.	2 6
Nos. 17-21 per 100 lbs.	2 6
Nos. 22-24 per 100 lbs.	2 7
Nos. 25-26 per 100 lbs.	2 75
No. 27 per 100 lbs.	2 8
No. 28 per 100 lbs.	2 90

GALVANIZED.

Nos. 10-11 per 100 lbs.	$2 90
Nos. 12-14 per 100 lbs.	3 00
Nos. 15-16 per 100 lbs.	3 10
Nos 17-21 per 100 lbs.	3 25
Nos. 22-24 per 100 lbs.	3 40
Nos 25-26 per 100 lbs.	3 60
No. 27 per 100 lbs.	3 80
No. 28 per 100 lbs.	4 00

POLISHED SHEET STEEL.

No. 24 per 100 lbs.	$4 8
No. 26 per 100 lbs.	4 9
No. 27 per 100 lbs.	5 0
No. 28 per 100 lbs.	5 1

SMOOTH STEEL.

Wood's Smooth, No. 20	$3 05
" " No. 22-24	3 10
" " No. 25-26	3 15
" " No. 27	3 20
" " No. 28	3 30

PATENT PLANISHED SHEET STEEL.

Patent Planished Sheet Steel. "A" $10 20, "B"	$9 20
Dickey Planished Sheet Steel	8½c

GALVANIZED IRON. Regular Sizes.

No 16, per 100 lbs.	$3 20
Nos. 18 & 20, per 100 lbs.	3 35
Nos. 23 & 24, per 100 lbs.	3 70
No. 26, per 100 lbs	3 00
No. 27, per 100 lbs	3 50
No. 28, per 100 lbs	3 70
No. 30, per 100 lbs	3 90
Nos. 22 & 24 x 36 in., per 100 lbs.	3 10
No. 26 x 36 in., per 100 lbs.	3 90
No. 27 x 36 in., per 100 lbs.	4 10
No. 28 x 36 in., per 100 lbs	4 30

SOLDER.

XXX Guaranteed ½ & ½, per lb.	29 c
Commercial ½ & ½ per lb.	28½c
No. 1 Plumbers	27 c

SHEET ZINC.

600 lb. Casks case, per cwt.	0 90
300 lb. Casks per cwt.	7 90
Sheets per cwt.	7 70

COPPER.

Copper base,	26c

TIN PIGS AND BARS.

Banca, pigs, per lb	35@35½c
Straits, pigs, per lb	35c
Straits in bars, per lb	37c

LEAD.

American Pig	$4 60@$4 62½
Bar	6½c
National (White) brands (in less than 100 lb. lots), per lb	7½c

Sheet.

Full coils per 100 lbs.	$7 00
Cut coils per 100 lbs.	7 25

HARDWARE.

ADZES.

Carpenters'.	
Triumph	40&10%
Plumbs	50&5%
Coopers'.	
Barton's	20%
White's	15%
Railroad.	
Triumph	40&5%
Plumbs	50%
Ship.	
Triumph	33⅓&5%
Plumbs	40%
White's	12½%

AMMUNITION.

Caps, Percussion—per 1,000.	
F. L. Waterproof, 1-10s	40c
G. D.	35c
Musket	60c
Cartridges.	
Winchester Rim Fire Ctgs.	50&3%
Winchester Cent Fire, Pistol and Rifle	25&3%
Winchester Cent Fire, Military and Sporting Ctgs.	15&8%
Winchester Blank Ctgs. 22 cal.	$1 25
Winchester Blank Ctgs. 33 cal., C. F.	4 60
Winchester BB Caps, Rnd. ball	1 50
Winchester BB Caps, Conical ball	1 95
Winchester Cent. Fire, Military and Sporting Ctgs	15&8%
Primers.	
Berdan Primers	$1 00
Winchester Primers	20%
Shells.	
New Rival Empty Paper Shells, 10 and 12 gauge	25%
New Rival Empty Paper Shells, 16 gauge	20%
Repeater Empty	20%
Leader Smokeless	25%
Winchester Repeater Loaded Shells	40&5%
Winchester Leader	40-10&10%
New Rival Loaded Shells	33⅓ & 11%
Gun Wads—per 1,000.	
Winchester Gun Wads	15%

Powder.	Each
DuPont's Sporting, kegs	$4 50
" " ½ kegs	2 50
" " ¼ kegs	1 40
Dupont's Sm'k'less. 50-lb. drum	22 45
" " 25-lb. kegs.	11 35
" " 12½-lb. kegs	5 80
" " 6½-lb. kegs.	2 97
" " 1-lb. cans	51

Shot.

Drop shot, sizes smaller than B, 25-lb. bags, per bag	1 90
Drop shot, B and larger sizes, 25-lb. bags, per bag	2 15
Buck Shot, 25-lb. bags, per bag	2 15
Chilled Shot, 25-lb. bags, "	2 15

ANCHORS.

Expansion Screw Anchors	10%

ANVILS.

Trenton, 70 to 80 lbs	9½c per l
Trenton, 81 to 150 lbs	9½c per l

ASBESTOS.

Board and Paper	33⅓%

AUGERS.

Boring Machine	70%
Irwin's	40&10%
Carpenters' Nut	70%
Hollow.	
Bonney's—list $30.00	75&5%
Stearn's, No. 3 "	36 0
Post Hole.	
Digwell, 8-inch per doz.	12 5
Iwan's Post Hole and Well	40&5%
Vaughan's, 4 to 9-in., per doz.	6 2
Rafting.	
Snell's	50&5%
Ship.	
Ford's, with or without screw	40-5%
Snell's, " " "	40-5%

AWLS.

Brad.	
No. 3 Handled per doz.	$0 4
No. 1050 Handled "	8
Shouldered, assorted, 1 to 4, per gro.	1 2
Patent asst'd, 1 to 4 "	8
Harness.	
Common "	9
Patent "	9
Peg.	
Shouldered per gro,	$1 2
Patent "	6
Scratch.	
No. 1, handled "	4 8
No. 15, socket handled. per doz.	1 2
No. 7 Stanley "	1 8
Sewing.	
Common per gro.	9
Patent "	90

AXES.

Boy's Handled.	
Lippincott, 3 lb per doz.	$5 00
Falls City "	5 00
Broad.	
Plumbs, West, Pat	40-12½%
" Can. Pat	50%
" Firemen's (handled). per doz	$18 50
Plumbs, Miners (handled) "	6 50
Single Bitted (handled).	
Gladiator 3 to 4 lbs., pr dz.	$10 00
Flint Edge " " "	8 25
Standard " " "	8 25
Elec. Chopper, Forest Clipper	9 50
Perfect Premier " "	9 00
Crown " " "	9 25
Single Bitted (without handles).	
Gladiator 3 to 4 lbs. per doz.	$7 25
Flint Edge " "	5 75
Standard " "	5 75
Electric Chopper " "	7 00
Perfect " "	6 50
Crown " "	5 00
Double Bitted (without handles).	
Gladiator 3 to 4 lbs. per doz.	$9 75
Flint Edge " "	8 50
Perfect " "	9 75

The above prices on axes of 3 to 4 lbs. are the base prices.
3½ to 4½ lbs. advance 25c.
4 to 5 lbs. advance 50c.
4½ to 5½ lbs. advance 75c.

BAGS, PAPER NAIL.

Pounds	10	16	20	25
Per 1,000	$2.50	3.75	4.50	5.00

BALANCES, SPRING.

Frary's	50%
Pelouze	20%

BARS, CROW.

Pinch or Wedge Point cwt.	$3 2

BASKETS.

Clothes.			
Small Willow per doz.	$5 7		
Medium " "	6 5		
Large " "	7 2		
Galvanized Iron.	½ bu.	1 bu.	1½ bu
Per doz.	$4 75	6 50	8 0

BEATERS.

Carpet.	Per doz
No. 10 Coppered Spring Wire	$0 90
No. 12 Spring Wire	1 10
No. 10 Preston	95

Egg.	Per doz
No. 50 Imp. Dover	$0 70
No. 100 " " tinned	85
No. 150 " " hotel	1 40
No. 10 Heavy hotel tinned	2 10
No. 13 " " "	3 30
No. 15 " " "	3 60
No. 18 " " "	4 50

BELLOWS.

Blacksmiths'	65%
Hand.	
8 inch per doz.	$7 50
10 inch "	9 50
Moulders'.	
12 inch "	11 00

BELLS.

Call.	
3 in. Nickeled Rotary Bell, bronzed base per doz.	$5 00
Cow.	
High Grade	60&10%
Kentucky	70&10%

Door.	Per doz.
New Departure Automatic	$6 00
Rotary.	
3 in. Old Copper Bell	4 00
3 in. Old Copper Bell, fancy	6 00
3 in. Nickeled Steel Bell	3 50
3½ in. Nickeled Steel Bell	5 00

Hand.	
Hand Bells, polished	50&10&5%
White Metal	50%
Nickel Plated	40%
Swiss	60&5%
Silver Chime	33⅓%
Miscellaneous.	
Church and School, steel alloy	50&10%
Farm, lbs. 40 50 75 100	
Each $1.25 1.60 2.35 2.85	

BEVELS, TEE.

Stanley's, rosewood handle, new list	40%
Stanley's iron handle	40%

BINDING, OILCLOTH.

Zinc	80&10&5%
Brass	75&5%
Brass Plated	75&10%

BITS.

Auger.	
Extra Double Spur	70&10%
Ford's Car and Machine	40&10%
Triumph	50&5%
Ford's Ship	40&10%
Irwin	50&5%
Russell Jenning's	25&10%
Clark's Expansive	60&5%
Steer's " Small list, $22.00	30%
" Large " $26.00	30%
Irwin Car	45%
Ford's Ship Auger pattern Car	40&10%
Center	40&10%
Countersink.	
No. 18 Wheeler's per doz.	$1 25
No. 20 " "	1 75
American Snail head. "	75
" Rose " "	90
" Flat "	75
Mayhew's Flat "	1 25
" Snail "	1 25
Dowel.	
New Jennings	40&10%
Gimlet.	
Standard Double Cut	60%
German Pattern per doz.	$0 60
German " "	65
Gouge " "	80
Spoon " "	80
Countersink " "	1 00
Reamer.	
Jenning's Square "	2 50
Standard Square "	75
German Octagon "	75
Screw Driver.	
No. 7 Common "	50
No. 1 Triumph "	1 25
No. 2 " "	1 50
No. 340 Shepardson's "	1 25
No. 1 Smith's "	1 25

BLACKING, STOVE. (See Polish)

BLADES, SAW.

Butchers'.
Standard ⅞ & 1⅛ in.....40%
Clock Spring.....40%
Star.....15%
Coil.....each $1 50

Hack.
Disston's.....25&5%
Flexible.....33⅓&5%
Star.....20&5%

Wood.
Jackson's.....per doz. $2 25
Disston's—No. 6, 16 26 & 045.. 4 25
Triumph..... 3 50
Forest Clipper..... 3 00

BLOCKS.

Snatch.
Wooden.....60&10%
Steel.....50%

Tackle.
Iron Strapped.....70&10%
Coin Steel.....60&10%

BOARDS.

Stove.....40%

Wash.
Globe, single.....per doz. $2 25
" double..... " 2 75
Magnolia..... " 2 65
Crystal Glass..... " 3 40
Brass King..... " 3 40
Nickel Plate..... " 3 40
Enamel King..... " 3 40

BOBS, PLUMB.

Carpenters'.
No. 2, iron.....per doz. $0 65
No. 00, " ..... " 1 30
No. 0, " ..... " 1 80
No. 3, lead..... " 2 90
No. 4, " ..... " 3 40
No. 113, brass plated. " 1 10
No. N30, nickel plat'd " 1 30
No. N31, " " " 1 85

BOLTS.

Carriage, Machine, Etc.
Carriage ⅝x6 and sizes smaller and shorter.....70&10%
Carriage, sizes larger and longer than ⅝x6.....60%
Machine, ⅝x4 and sizes smaller and shorter.....70&10%
Machine, sizes larger and longer than ⅝x⅝x4.....60&5%
Elevator.....50-10&5%
Plow.....60&10%
Stove.....80&10%
Tire.....75&5%
Wagon Box Strap.....70%

Mortise Door.
Gem, iron.....60%
" bronze plated.....20%

Barrel.
Cast.....60%
Wrought.....75&10%
" Bronzed.....50%

Flush.
Wrought.....50&10%

Spring.
Wrought.....70&10%
" Heavy.....70%

Square.
Cast.....50&10%
Wrought.....75%

BORERS.

Angular.
Miller's Falls.....per doz. $13 00

Bung.
Doz.
Enterprise Mfg. Co.'s No. 1....$14 00
" " " No. 2.....18 50

BOXES.

Mail, No.... 1 2 10
Per doz..... $3.25 4.50 17.50

Miter.
New Langdon.....15&5%
Stanley's.....30%
Seavey's.....each $1 50

BRACES.

Barber's.....50&10&10@50&10&15%
Fray's Genuine Spofford's.....60%
" Nos. 66 to 146.....50%
" No. 0108.....$3 50
" No. 0110..... 3 75
" No. 08..... 2 75
" No. 010..... 2 85

BRACKETS.

Hay-Rack.
Wenzelmann's No. 1 per doz. $9 00
" No. 2 " 9 60

Shelf.
Cast Iron, Bronzed..... 50, 10, 5%
Griffin Wrought Steel..... 75&10%
" Folding..... 70&10%

BROILERS.

Wire.....70&10%
Crown, Self Basting, No. 80. doz. $2 50

BUCKETS

Pump Rubber
Wychoff.....per gr. $4 75
Cooper..... " 4 75
Champion..... " 7 50
Victor..... " 9 25
Star..... " 5 00
IXL..... " 6 75

Well.
Galv'd Qts..... 10 12 14
Per doz..... $2 90 $3.25 $3.40
Wooden, top ear, plain, per doz: 3 75
" " swivel " 4 85

BUCKS, SAW.

Folding.....per doz. $2 10

BURRS, RIVETING.

Copper Burrs only.....75%
Tinners' Iron Burrs only.....70%

BUTTS.

Cast Iron.....70&5%
Wrought Brass.....15%
Wrought Steel Bright.
Stanley.....75&5%
" Ba l Tip.....75&10%
" " Bronzed.....70%
Wrought Steel, Japanned.
Nos. 731 and 733.....70-10-10&10%

CALIPERS.

Double.....70%
Inside and Outside.....70&10%
Wing.....70%

CALKS.

Logger's Boot.
(Lufkin R. Co.'s), per M.....$3 75

Toe.
Shoenberger.....per ℔ 5 c
Bessemer..... " 4½c
American..... " 7 c
Swedes..... " 8½c

CANS.

Cheese Factory.
Ontario Pattern.
Gallons..... 20 30 40
Each..... $3.85 $4.50 $5.65

Milk.
Holstein.
Nos..... 300 301 302
Gals..... 5 8 10
Per doz..... $20.00 $21.00 $23.00
Chicago Pattern.
Nos..... 105 108 110
Per doz.... $16.50 $18.50 $20.50
Iowa Pattern.
Nos..... 408 410
Per doz..... $20.50 $21.50
New Elgin Pattern.
Nos..... 705 708 710
Per doz..... 20.50 $22.50 $23.50
Burn Pattern.
Nos..... 700 701
Gals..... 8 10
Price..... $1.85 $2.10

CAN OPENERS.

See Openers.

CAPS, GUN.

See Ammunition.

CARPET STRETCHERS.

See Stretchers.

CARRIERS.

Hay.
Diamond, Regular.....each $3 50
Diamond, Sling..... " 6 50
Myers' Imperial..... " 3 50
" Clover Leaf..... " 3 65

CARTRIDGES.

See Ammunition.

CASTERS.

Standard—Ball Bearing.....50&10%
Bed.....60&5%
Common Plate.
Brass Wheel.....60&10%
Iron and porcelain wheels, new list.....60&5%
Philadelphia Plate, new list.. 70%
Martin's.....60%
Payson's.....75&10%

CATCHERS, GRASS.

Carroll s No. C.....per doz. $4.25
Wildermuth's
Nos..... 1 2 3
Per doz..... $5.60 $5.75 $6.25
Nos..... 4 5 6
Per doz..... $6.75 $9.50 $10.00

CHAIN AND CHAINS.

Breast Chains.
Doubleslack.....doz. pairs $5 75
With Covert snaps. " 5 00
With slide..... " 3 25
Without slide..... " 2 85

Bright Ox Chains.
$\frac{5}{16}$ in. $7.25; ⅜ in. $5.45 per 100 lbs.

Cable Coil Chain.
Inch..... $\frac{5}{16}$ ⅜ $\frac{7}{16}$ ½
Per 100 lbs.. $9.80 $7.00 $6.00 $5.20
Inch..... $\frac{7}{16}$ ½ ⅝ ¾
Per 100 lbs.. $5.00 $4.90 $4.75 $4.65
Inch..... ¾ 1 1¼
Per 100 lbs.. $4.55 $4.55 $4.65

Cable Log Chain.
Advance 25c per 100 lb. on Cable Coil

Cow Tie Chains.
American 2 toggle.....50&5%
" toggle and snap...50&5%
" open & closed ring, 50&5%

Halter Chains.
American, new list.....33⅓&5%
German.....60&5%
Niagara, new list.....40&5
Brown's, " .....40&5%

Picture Chains.
Light Brass, 3 ft.....per doz. 50c
Heavy Brass, 3 ft..... " 75c

Pump Chain.
Galvanized, per 100 lbs.....$5.00

Safety Chain.
Brass.....60&10%

Special Steel Loading Chain.
Inch..... ¼ $\frac{5}{16}$ $\frac{7}{16}$
Per 100 lbs... $16.00 $13.50 $12.50

Stretcher Chains.
$\frac{5}{16}$ in. $8.50; ⅜ in. $7.75 per 100 lbs.

Tie-Out Chains.
Brown's.....70&10%

Trace Chains.
Western Standard.
6½—6-2.....per pair 30c
6½—8-2..... " 34c
6½—8-3..... " 33c
6½—10-2..... " 38c
7 —8-2..... " 38c
7 —10-2..... " 42c
7 —10-1..... " 48c
7 —10-0..... " 60c
Add 2c per pair for Hooks.
Add 2c " for Twist Link.

Wagon Stay Chains.
Inch..... ¼ $\frac{5}{16}$ ⅜
Per 100 lbs... $6.50 $6.00 $5.50

CHALK, CARPENTERS'.

Blue.....per gross 75c
Red..... " 65c
White..... " 55c
Common White Sch'l Crayon..... 8c

CHARCOAL

In bags.....per bag 85c

CHECKS, DOOR.

Blount.....33⅓%
Sargent's.....33⅓%

CHIMNEY TOPS.

Iwan's Volcano.....50%

CHISELS.

Box,
Inches..... 10 12 14
Round, per doz. $2.10 $2.25 $2.75
Flat " 2.85 3.60 4.20

Cold.
Good quality, ⅜ in. and larger..... per ℔ 12c
Smaller size per doz.

Socket, Framing and Firmer.
Barton's.....20%
Peck, Stow & Wilcox Co.....75-5%
For beveled back, add per doz. .60c

Tanged, Firmer.
With handles.....30&5%

Choppers, See Cutters, Meat.

CHUCKS, DRILL.

Goodell's, for Goodell's Screw Drivers.....per doz. $6 25
Yankee, for Yankee Screw Drivers..... 5 00

CHURNS.

Anti-Bent Wood, Gal.. 5 7 10
Each.....$3.90 $4.60 $4.85
Belle, Barrel.....65-7½%
Common Dash, Gal.. 4 5 6
Per doz.....$7.75 $8.50 $10.50
Hero.....65-7½%
Union, Gal..... 5 7 10
Each..... $3.65 $3.90 $4.75

CLAMPS.

Adjustable.
Martin's.....30%

Carpenters'
Steel Bar.....25%

Hose.
Sherman's, brass, ½ in., per doz. .33c
Double, brass, ¾ in., " 65c

Saw Filers.
Disston's list, $30.00.....30%
Stearn's, No. 0, $3.50; No. 1, $11.50; No. 3, $5.00 doz.
Wentworth's. No. 1 $6.00; No. 3 $7.50

CLAWS, TACK.

Cast, wood hdle.....per doz. 45@60c
Forged steel, wood hdle " $0.80
Solid Steel..... " 1.60
Giant..... " .60

CLEANERS.

Drain.
Iwan's Adjustable.....55%
Iwan's Stationary.....40&5%

Pot.
Wire.....per doz. $0.55

Side-walk.
Steel.....per doz. $3.25
XLCR.....65&5%

CLEAVERS.

Family.
Griffin, In..... 6 7 8
Per doz..... $5.50 $5.75 $6.25
Royal.....per doz. 2 25

Butchers.
Beattys, Kitchen.....40%

CLEVISES.

Malleable..... 4½c ℔

CLIPPERS.

Bolt.....$1.90@$4.75

CLIPS.

Axle.....65&5%

Damper.
Standard.....per doz. 65c
Troy..... " 38c

Hame..... " 17c

CLOTH.

Emery.
Triumph.....50&10%
B. & A..... 50%

Hardware Wire—full rolls (100 ft.)
2 to 8 mesh black, per 100 sq. ft..$1 95
9 to 12 " " " " 2 25
2 to 3 inclusive—in full roll.....3 00
4 and 5..... " 3 25
6..... " 3 50
7 and 8..... " 4 00

Screen Wire.
12 mesh, painted, per 100 sq. ft..
14 " " " "

COCKS AND FAUCETS.

Compression Plain Bibbs...60-10-2½%
Lever Bibb Cocks.....60&10%
Compression Hose Bibbs.....60&5%
Telegraph Faucets (new list)...50-5%
Racking Cocks (new list).....60&10%
Compression Lock C'ks(n'w list)..70%
Andrew's Brass Faucets.....70%
Angle Plug Faucets, per doz... $0.85
Milk Can Faucets, per doz...$2.60-4.20
Petroleum Faucets..... 75&10%

COLLARS, STOVE PIPE.

Inches..... 5 6 7
Plain Tin....per gro. $1.60 $2.00 $3.00
Japanned Tin " 3.00 3.00 4.25
Lacquered Brass " 2.75 3.25 4.00

COMBS, CURRY.

Nos . 000 11 15 39 89 108
Per doz. $0.32 .55 1.85 .85 1.10 .75
Nos.... 299 390 390 532 620 1400
Per doz. $1.00 .80 1.30 1.15 .70 1.35

COMPASSES.

Carpenters'.....70%
Pencil—Faber's.....per doz. $1.00

COPPER—See Metals.

COPPERS.

Soldering.
1 ℔.....per ℔ 35c
1½ ℔..... 33c 2 ℔.... " 31c
3 ℔ and larger..... " 28c

CORD.

Picture.
White Wire (new list).....85%

Sash.
Baltic Braided Flax.....per ℔ 20c
Silver Lake, white 7-32 in. " 29c
" " " 8-32 in. " 29c
Keystone.....8-32 in. " 26c

CORKSCREWS.

Humason & Beckley.....33⅓%
Walker's.....33⅓%
Williamson's Regular..... 50%
Williamson's Forged Worm.....50%

COTTERS, SPRING.

All sizes—new list.....90&30%

COUPLINGS, HOSE.

Brass.....per doz. $ .90
Brass Plated..... " .85

COVERS, WAGON—See Tents.

CRADLES, GRAIN.

Morgan's Grapevine...per doz. $28.75

CRAYONS—See Chalk.

CROW BARS.

Pinch or Wedge Point, per 100 lbs. $3.25

CUTTERS.

Glass.
Red Devil 45%
Smith & Hemenway Co. 50%
Woodward 40%
Meat.
Enterprise Nos. 5, 10, 12, 22, 32 and 42 ..... 25%
No. 202, list, $1.50 ea. ..... 40&7½%
Universal... Nos. 1 2 3
Per doz. $10.50 $12.50 $17.00
Pipe.
Stanwoods... No. 1 2 3
Each $0.85 $1.50 $4.00
Slaw and Crout.
3-knife Crout ..... per doz. $9 75
1-knife Slaw ..... " 1 65
2-knife " ..... " 2 25
Washer ..... " 7 75

DAMPERS, STOVE PIPE.

Standard ..... 50&10%
American ..... 45&10%

DIES, STOCKS AND

Discount ..... 40&5%
King's, Little Giant 33⅓%

DIGGERS.

Post Hole.
Acme ..... per doz. $8 75
Atlas ..... " 8 50
Eagle ..... " 5 75
Eureka ..... " 7 00
Hercules ..... " 9 75
Iwan's Split Handle.. " 7 00
Iwan's Perfection..... " 7 75
Iwan's Hercules pattern " 9 00
Ryan's ..... " 17 00
See also Augers—Post Hole.

DOOR CHECKS—See Door.

DOORS, SCREEN.

⅞ in. 4-panel painted, per doz. $7 93
1⅛ in. " " " 9 50
1⅛ in. 3-panel natural pine, fancy ..... per doz. 12 40

DOOR HANGERS—See Hangers.

DRILLS.

Bit Stock ..... 60% & 65&5%
Blacksmith's Twist 60%
Breast.
Common ..... each, $2 25
Millers Falls ..... " 2 10
Hand
Goodell's Automatic.
Nos. 01 03 3 20
Per doz.. $7.75 $12.50 $14.25 $11 00
Goodell's Single Gear per doz. 15 75
Millers' Falls " " " 12 75
" " Double " " 15 25
Reciprocating.
Goodell's ..... per doz. $16 50
Bit Stock.
Standard List... 60&5%@60%@10%

DRIVERS, SCREW.

Hurwood ..... 40-10&10%
Standard ..... 65&10%
Lock Ferrule 60%
Champion 50%
" Pattern 70%
Clark's Interchangeable 30%
Edison 60%
Reed's Lightning ..... 45&5%
Goodell's Spiral ..... 50, 10, 5&2½%
Yankee Ratchet 50%
" " Spiral ..... 50&10%
Smith & Hemenway Co. ..... 40&5%

EAVES TROUGH. GALVANIZED.

Territory. L. C. L.
Eastern 80%
Central ..... 75&10&7½%
Southern ..... 70&20&7½%
Western ..... 70&20&7½%
S, Western ..... 70&20%
Terms, 2% for cash. Factory shipments generally delivered.
See also conductor pipe and elbows.

EGG BEATERS—See Beaters.

ELBOWS.

Adjustable Stove.
Inches 5 6 7
Smooth, per doz. $0.70 $0.75 $1.10
Plan'd " 1.80 2.00 2.65
Corrugated Conductor.
Discount ..... 60&10%
Corrugated Stove.
Inches 5 6 7
Smooth, per doz. $0.70 $0.80 $1.30
Pol'd " 1.30 1.40 2.10
Plan'd " 2.00 2.20 3.00
Four-Piece Stove.
Inches 5 6 7
Smooth. per doz. 0 10 $0.52 $0.80
Pol'd " .80 1.00 1.20
Plan'd " .90 1.40 2.40

EMERY CLOTH—See Cloth.

EMERY, TURKISH.

Size ..... 5-lb. pkgs. ¼ kegs, kegs
No. 60 to 150, per lb. 6c 4c 4c
Flour ..... " 5c 3c 3c

ENAMEL, IRON.

Nubian, ½-pt. cans ..... per doz. 1 65
Peerless 1 25
Keystone 1 25

EXTRACTORS, PIG.

See Forceps, Pig.

EYES.

Bright Wire Screw—See Goods, B. W
Drifting Pick ..... 60, 10&5%
Hooks and—
Brass 60%
Iron 70%

FASTENERS, STORM SASH

Schroeder's ..... per doz. 85
Sensible ..... " 1 15

FAUCETS—See Cocks.

FILES AND RASPS.

Nicholson's ..... 70&10%
Disston's ..... 75&10%
Kearney & Froh ..... 75&10%
Royal ..... 80&10%

FLUE STOPPERS—See Stoppers.

FORCEPS, PIG.

Superior ..... per doz. $4 75
Whisson's Imp ..... " 5 25

FORKS.

These goods are sold net this year.
Barley.
Steel, New List ..... 70&10&5
Wood, 4 tines, per doz. $3.25
Coal, Coke, Cottonseed 60%
Hay,
Jackson, 2 tine ..... 60&10%
" 3 " 70%
" 4 " ..... 70&7½%
Digging ..... 70&10%
Scoop 40%
Header.
Jackson, 3 tine ..... 66⅔&5%
" 4 " ..... 65&10%
Manure.
Jackson, 4 tine ..... 70&5%
Ore 40%
Spading.
Jackson ..... 80&10%

FRAMES.

Hack Saw.
Union ..... per doz. $5 75
Jenning's ..... " 6 25
Cast ..... " 2 50

FREEZERS, ICE CREAM.

Arctic.
Qts. 1 2 3 4 6
Each $1.10 1.30 1.50 1.80 2.30
Qts. 8 10 12 15
Each $2.95 3.80 4.50 5.30
White Mountain.
20 qt., New Platform... each $19 10
25 qt., " " " 22 60
25 qt., Sampson Power . " 43 50
40 qt., " " " 58 25

GAUGES.

Butt and Rabbet.
Stanley R. & L. Co.'s ..... 20&10%
Cream Pail.
Fairmont ..... per doz. $3 75
Marking, Mortise, etc. .....
..... 50&10%
Saw.
Atkin's, single, 55c; dbl. 80c per doz
Wire.
Disston's 25%

GIMLETS.

Discount ..... 35@40%

GLASS, WINDOW.

First two brackets ..... 90&20%
Above " " ..... 90&10%

GLASSES, LEVEL.

Stanley R. & L. Co. ..... 50&5%

GLUE.

Bulk.
B Amber ..... per lb. 11 c
A White ..... " 14 c
H. S. Amber ..... " 15½c
Liquid.
Army & Navy 40%
Le Page's—
List "A" 37½%
List "B" 33⅓%
List "C" 25%

GOODS.

Bright Wire ..... 65&20%

GREASE, AXLE.

Wood Boxes.
Diamond ..... per gro. 5 50
Frazer's 9 50
Hub Lightning 5 25
Paragon 6 75
Wood Pails.
Frazer's, 15 lb. 80c; 25 lb. $1.30 each
Hub Lightning, 15 lb. 55c; 25 lb. 70c each.
Tin Cans.
Chamellene Graphite.
1 lb. per gross $9 50
3 lb. per gross 25 00
5 lb. per gross 37 00

GRIDDLES.

Soapstone ..... 40&10%

GRINDSTONES.

Family.
Inches 7 8 9
Per doz. $8.25 9.00 10.50
Loose.
Per ton ..... $20 00@$21 00
Mounted.
Ball Bearing 1 2 3
Each $3.15 3.00 2.85
Common Bearing.. 1 2 3
Each $3.00 2.80 2.65

GUN WADS.
(See Ammunition.)

HAFTS, AWL.

Brad.
Common ..... per doz. $0 19
Peg.
Common ..... " 22
Patent, plain top .... " 47
" leather top... " 52
Sewing.
Common ..... " 22
Patent ..... " 52

HALTERS.

Jute Rope ..... per doz. $0 85
Sisal Rope ..... " 1 85
Web ..... " 1 75
Leather, rope tie ..... " 6 50
" leather tie.... " 8 50

HAMMERS, HANDLED.

Blacksmiths' Hand.
Plumbs ..... 60&5%
Engineers'.
Plumbs ..... 60&5%
Farriers'.
Plumbs ..... 40&12½%
Machinists'.
Plumbs ..... 60&5%
Nail.
Plumbs ..... 40&12½%
Quaker City ..... per doz. $3 00
Cast ..... " 1 10
Maydole's ..... 30&5%
Riveting.
Plumbs ..... 40&12½%
Shoe.
Cast ..... per doz. 75c
Tack.
All Iron ..... per doz. $0 35
Pol'd Iron, Hickory hdl. " 50
Mall. Iron, Inlaid ..... " 1 55
Magnetic 1 2 3
Per doz 70c 80c $1.00
Magazine ..... per doz. $4 75

HAMMERS, HEAVY.

Heavy Hammers and Sledges.
Under 5 lbs. ..... 75&10%
5 lbs. and over 80%
Masons'.
Single & Double Face ..... 75&10%

HANDLES.

Auger.
Common Assorted ... per doz. $0 38
Peck's Adjustable ... " 2 10
Ives' " ... per set 1 35
Axe 60%
Chisel
Hickory, Tanged Firmer, Assorted, 33c; Large, 38c per doz.
Hickory, Socket Firmer, Assorted, 27c; Large, 30c per doz.
Applewood, Tanged Firmer, Assorted, 29c; large, 38c per doz.
Applewood Socket, Firmer, Assorted ..... per doz. 24c
Coal Pick ..... 50&10%
Drifting Pick ..... 50&10%
File, assorted 13c, large 16c per doz.
Hammer.
Adze Eye ..... per doz. 40c
Blacksmiths' ..... per doz. 40c@70c
Machinists' ..... " 45c@70c
Hatchet ..... per doz. 40c
Hay and Manure Fork 30%
Hoe and Rake 30%
Saw.
Plain ..... per doz. 75c
Varnished ..... " 80c
Screw Driver.
Assorted ..... " 37c
Large ..... " 48c
Shovel and Spade 33⅓%

HANGERS.

Barn Door
Challenge ..... 60&10%
Peerless ..... 70&10%
Silver Star ..... 60&5%
Storm King ..... 60@5%
World's Best 50%
Wagner's Adjustable ..... 70&10%
Warehouse 60%
Griffin ..... 70&10%
Conductor Pipe.
Griffin ..... 70&10%
Iwan's Perfection 50%
Eave Trough.
Baker's ..... per gro. $2 35
Imperial 20%
Wire 35%
Parlor Door.
Acme ..... per set $3 75
Ives' Improved ..... " 2 50
Lane's Standard ..... " 3 50
" New Model ..... " 3 10
Le Roy Noiseless ..... " 4 00
Richards' ..... 40-10&5%

HASPS.

Hinge, Wrought ..... 50&5%
With Staples—See Staples.

HATCHETS.

Challenge 40%
Blood's ..... 40&10%
Cast Claw ..... per doz. $1 20@1 45
Cast Shingling.... " $0 95@1 20
Germantown 40%
Plumb's ..... 40&5%
Underhill's Star Lath ..... 40&10%

HAY KNIVES.

See Knives.

HAY RACK BRACKETS.

Wenzleman's No. 1.... per doz. $ 9 00
" No. 2.... " 9 60

HINGES.

Blind.
Clark's Gravity ... per doz. sets 80c
Parker's 65%
Shepherd's Noiseless, for Wood casing ..... per doz. 1 05
Gate.
Clark's 1 2 3
Hgs & Ltch .... doz. $2.35 2.60 3.65
Hinges only .... " 1.70 1.90
Latches only... " .70 .75
Knuckle ..... per doz. prs. $6 00
Leed's ..... " sets 6 75
Superior ..... " prs. 9 50
Spring.
American 20%
Bommer Bros. Ball B'g Floor.. 35%
Bommer Bros. Spring Hinges.. 40%
Chicago ..... 25&5%
Columbia Dbl. Acting .... 40&10&5%
Gem 25%
Ideal Detachable .... per gro. $11.10
Matchless 30%
New Idea ..... per gro. $8.40
Oxford 20%
Wrought Iron.
New Lists .....
Griffin.
Light Strap Hinges ..... 65&10&5%
Heavy Strap Hinges ..... 75&10%
Light T Hinges ..... 60&10&7½%
Heavy T Hinges ..... 55&10%
Extra Heavy T Hinges .... 70-10&5%
Cor. Heavy Strap ..... 75&10%
Cor. Ex. Heavy T ..... 70&10&5%
Screw Hook and Strap.
6 to 12 in ..... per 100 lbs. $3 90
14 to 20 in ..... " " 3 65
22 to 36 in ..... " " 3 40
Screw Hook and Eye.
¾ in ..... per 100 lbs. $6 55
⅝ in ..... " " 7 60
½ in ..... " " 9 45

HOES.

Garden ..... 75&5%
Grub.
Extra 70%
Hazel ..... per doz. $5 00
Ladies' and Boys' ..... 75&10%
Mortar 80%
Planter's Eye 62½%
Weed ..... 75&15%

HOLLOW WARE—See Ware

HOOKS.

And Eyes.
Brass ..... 50&10&5%
Iron ..... 65&10%
Awning ..... per gro. $1 80
Belt.
Brown's ..... 70&5%
Jones' ..... 65&5%
Bench.
See Stops, Bench.

Box.
Inch..... 6 8 10 12
Per doz.....$1.35 1.65 1.75 2.30
Humason & Beckley's, per doz. 2 50
(See Goods, Bright Wire.)

Bush.
Common Axe Handle, per doz. $7 00

Chain.
Inch... ¼&5/16 ⅜ 7/16 ½
Per 100 $7.60-8.10 9.75 11.50 12 60

Clothes Line.
Japanned.....per doz. 22c@24c
Galvanized..... " 40c

Coat and Hat.
Cast Iron .....per gro. 72c@$1 50
Gem Wire.....70¢

Conductor.
Malleable.....50&10¢@50&10&5¢
Wrought .....40&10¢@50¢

Corn.
Common, unpolished, per doz. $1 35
" polished.... " 1 80
"Cut Easy"..... " 2 75

Gate.
See Goods, Bright Wire.

Grass.
Common. Nos..... 2 3 1
Per doz.....$1.50 1.60 1.70
German.....per doz. 1 75
Little Giant..... " 3 00

Hammock.
With Plate.....per doz. 50c
With Screw..... " 45c

Lambrequin, or Drapery, per gro. 21c

Picture .....50¢@50&10¢

Potato and Manure.....70&12½¢

Screw.
Brass.....80&5¢
(See Goods, Bright Wire.)

Seat Spring.....per ℔. 5½c

HOOPS, TUB.

Ever Ready .....per case $1 70

HOSE, GARDEN.

3 ply ½ in. 35 ℔. pressure per ft....4½c
3 " ½ " 50 " " " 6½c
3 " ¾ " 70 " " " 6½c
3 " ¾ " 70 " " " ....8 c
4 " ¾ " 80 " " " ....8 c
4 " ¾ " 80 " " " ... 9½c
6 " ¾ " 125 " " " ...10½c
8 " ¾ " 150 " " " 12c
Cotton ¾ in. 75 ℔. pressure per ft. 6c
" ¾ " 150 " " " 8c

HUSKERS.

Boss.
Nos..... B BB E 200
Per doz.... $2.00 2.00 1.75 .80
Nos..... L PP P K
Per gro..... $5.40 6.00 6.00 10.50
Nos..... 2000 2000 O
Per gro..... $8.50 9.00 24.50
Nos..... 60 59 64 68
Per doz.....$2.15 2.15 .85 1.45

Brinkerhoff's.
Per gro.....$14 40

Clark's
Nos..... 1 63 200 400
Per doz.... .... $0.40 .75 .75 1.75
Nos..... 200s 40s 3s 4s
Per doz..... $0.85 1.50 1.25 1.35
Nos.....A AB F
Per doz.....$3.00 $4.25 $2.50

IRON.

See Metals—First column.

IRONS.

Curling.
Common.....per doz. 23c@48c
Princess .....per doz. $0 65
Yale..... " 84
Oxford ..... " 1 15
Ruby ..... " 1 50
Tourist, Folding..... " 90

Pinking ..... " 70

Plane.
Wood Bench.....20&5¢
Stanley R. & L. Co. (new list)...25¢

Sad.
Charcoal .....per doz. $11 00
Common, Polished, per 100 ℔. 3 50
" Nickel plated, " 4 50
Chinese Polishing.....per doz. 7 40
Laundry. No. 1 ..... " 5 75
" No. 2 ..... " 6 25
Mrs. Pott's,
No. 50 J, Enterprise...per set 79c
No. 55 J, " ... " 76c
No. 50 T, " ... " 82c
No. 55 T, " ... " 79c
No. 50, Howells..... " 67c
No. 55, " ..... " 71c
Tailors' Sad.....per ℔. 4½c
" Goose ..... " 4½c

Tuyere.
Single Duck Nest.....per doz. $5 25
Double " " ..... " 6 25
Sutton .....each 2 60

JACKS.

Locomotive.....70&7½¢

Wagon.
Oliver.
Nos 0 00
Each..... $0.60 $0.85
Standard.
Nos..... 1
Each..... $0.60 1.00
Wilcox.
Nos..... 1 2 3
Each..... $0.85 1.20 2.90

KETTLES.

Brass.....15¢
Cauldron .....45¢
Copper.....per ℔. 27c
Maslin .....70¢
Sugar .....50&5¢

KNIVES.

Beet Topping.
Clyde, 9-in. Scimiter Blade, dz. $3 85
California.....3 40

Cooper's Hoop.....15¢

Corn.
Clipper.....per doz. $1 75
Disston's..... " 2 75
Earle's ..... " 3 00
Woodford..... " 2 25

Drawing.
Standard .....70¢
Adjustable.....15¢
Barton's Carpenters'.....10¢
Folding Handle.....25&5¢

Hay.
American, Sickle Edge..doz $10 50
Canton, Sickle Edge..... " 8 25
Heath's ..... " 8 00
Iwan's Sickle Edge..... " 9 50
Iwan's Impv'd Serrated.. " 10 00
Lightn'g, Holt's Genuine " 6 50
Lightning Pattern..... " 6 00
Wadsworth's Sp'r Point " 8 50

Hedge.
Challenge .....per doz. $6 00
Disston's..... " 3 75

Mincing.
Common, Single ..... " 40
" Double ..... " 50
Streeter, 4 Blade..... " 1 30
" 6 Blade..... " 2 00

Putty.
Common..... " 60@1 00
Lander's..... per doz. $1 40@1 75

Scraping.
French Handle .....75@1 00
Lander's .....5 25@6 00

KNOBS.

Door.
Mineral .....per doz. $0 73
Porcelain ..... " 83
Jet..... " 83

LADDERS.

Common Long.
Per ft .....9c@14c

Extension.
Per ft 12c

Step.
Common, per ft.....6½c
" with Shelf, add 10c.
Keystone..... .....15c
Triumph, per ft 20c

LANTERNS.

Bull's Eye Police.
3-in. Flash Light.....per doz. $6 00
2½-in. Regular..... " 4 00
3-in. Regular..... " 5 00

Tubular.
Buhl..... .....40&10&5¢

LEADERS, CATTLE.

Nos 1 2 3
Per doz.....$0 55 $0 70 $2 75

LEATHER, LACE.

Cut.....40&10¢

Sizes.
Ex. Quality.....per sq. ft. 24c

LEATHERS, PUMP.

Valve and Plunger .....45¢

LIFTERS.

Stove Cover.
Coppered.....per gro. 1 75@3 65
Ideal..... " 5 50
Alaska, Coppered " 4 00
" Nickeled. " 5 00

Transom.
Payson's.....80¢

LINES.

Chalk.
Twisted in 20-ft. hanks.
Nos..... 4 6 7 8 9
Per gross $1 50 2 00 2 25 2 50 3 00
Twisted in 50-ft. balls.
Nos..... 1 2 3 4
Per doz.....25c 30c 35c 41c
Braided in 20-ft. hanks.
Nos..... 0 1 2 3
Per doz.....22c 25c 31c 35c
Masons', in 100-ft. hanks..doz... 80c

Clothes.
60-ft. Jute.....per doz. $0 80
72-ft. " ..... " 1 00
60-ft. Sisal ..... " 1 30
72-ft. " ..... " 2 00
50-ft. Cotton ..... " 1 00
50-ft. Braided Cotton. " 1 10

LINING, STOVE.

In Bricks.....per crate 42c

MACHINES.

Boring.	Without Augers	With Augers
Angular.....per doz.	3 00	4 40
Upright.... "	2 60	4 00

Leather Riveting.
Chicago, Pomeroy....per doz. $9 00
Excelsior ..... " 2 00
Handy ..... " 2 00
Little Giant..... " 3 00
Pony, Pomeroy..... " 7 20

Washing.
Boss 1 2 5
Per doz.....$55.20 61.80 68.40
Winner.....per doz. 54 00
Keystone ..... " 54 00
Round Wayne..... " 28 50
U. S. Steel..... " 60 00
Advance, f.o.b. Chic'go " 24 50

MAIL BOXES.

See Boxes.

MALLETS.

Carpenters'.
Fibre Head, Small ...per doz. $5 00
" " Medium. " 5 75
" " Large... " 7 00
Round Hickory..... " 1 75
" Lignumvitæ .. " 2 85
Square Hickory..... " 1 75
" Lignumvitæ.. " 3 40

Tinners'.
Applewood ..... " 1 70
Hickory..... " 75@1 15
Hickory Sheet Iron.. " 1 30

MATS.

Door.
National Rigid.....50, 10&5¢
Acme Steel Flexible.....33⅓¢

Stove.
No. 2. .....per gross. $2.75
No. 1. ..... " 3.00
No. 1 Asbestos Toasters, or wire-covered Stove Mats, with handle.....per doz. 1.10
No. 2 Asbestos Toasters, with ring.....per doz. .60

MATTOCKS.

Warwood .....70¢
Extra .....60¢

MAULS.

Iron. lbs. 10 13 16 1
Per doz. $4.00 4.50 5.25 5.60
Wood face, lbs. 10 12 14
Per doz $5.00 5.50 6.00

Wood Choppers'.
Lake Super'r & Oregon Pat. 75&10¢

MEASURES.

	½ pk.	1 pk.	bu
Galvanized. per dz.	$2.25	$3.00	$3.85
Japanned... "	1.75	2.45	3.15

METAL.

Babbitt.
Alm .....per lb. 7½c
Best..... " 13 c
Common, No. 4..... " 6½c
Copper Mixed ..... " 19 c
Tony ..... " 9½c
See Metals—In first column.

MICA.

First Quality.....20¢
Second Quality.....20&10¢

MILLS, COFFEE.

Enterprise .....25¢
Parker.....50¢
Arcade .....50¢

MITRE BOXES.

See boxes.

MOPS.

Erie.....per doz. $3 15

Handled Cotton.
Pounds..... ¾ 1 1¼ 2
Per dozen...$2.00 2.25 2.65 3.25

MOWERS, LAWN.

Ball-Bearing.
Inches..... 14 16 18 20
Each $6.25 6.75 7.25 8.00

Cheap Grades.
Inches..... 12 14 16 18
Each $2.25 2.25 2.35 2.50

Clipper .....50, 10&10¢

Yale.
Inches..... 4 16 18 20
Each.....$3.50 3.75 4.00 4.35

Philadelphia.
All Styles Except A & E 60, 10&10¢
Style A.....50&10¢
Style E, High Wheel..60,10,10&10¢
Drevels.....50¢
All Day.....Net Price

NAILS.

Cut Steel.....rates, $2 10

Horse Shoe.
Ausable .....55&5¢
Capewell .....15¢
Perfect .....55&5¢
Putnam .....20-5¢
Star.....35&5¢
Clover Leaf.....per lb. net, 10½c

Picture.
Brass Heads.....33⅓&5¢
Jddu's.....60&10¢

Brads.....85&10¢

Furniture .....50¢

Wire.
Small Lots.....$2 15
Carload " 2 05
Cement Coated..... 1 90

NAIL PULLERS.

See Pullers.

NAIL SETS.

See Sets.

NETTING, POULTRY.

Galvanized before Weav'g.
" After Weaving
Cut Pieces.....65&5¢

NIPPERS.

End Cutting.
Stubb's Pattern. Ins. 5½ 6
Per dozen $4.00 $4.25

End and Diagonal Cutting.
Swedish Side.....75¢
Utica Drop Forge & Tool Co...60¢

Hoof.
Heller's .....40&10¢
V. & B.....55-5¢

NOZZLES.

Hose.
Genuine Gem.....per doz. $3 15
Magic..... " 3 50
Mystic..... " 2 90

NUTS, HOT PRESSED.

Square Blank.
In. ½ 9/16 ⅝ 7/16 ¾ ⅞
℔. 9½c 8c 6½c 5½c 5½c 5c 4½c

Square Tapped.
In. ½ 9/16 ⅝ 7/16 ¾ ⅞ 1
℔. 13½c 10½c 8c 7½c 6½c 6½c 6c
For 5 lb. boxes add ½c per ℔. to above prices.

OILERS.

Chase Pattern.
Brass and Copper.....60&10&5¢
Zinc .....60&5¢

Engineers'
Cannon.....55¢
Tin.....per doz. $2.00@$2.25

Machine.
Common .....per doz. $0 50
Copper Plated Steel.. " 85
Malleable Iron.....60, 10&5¢
Jappaned..... .....65@75c

OPENERS.

Box.
Inches..... 10 12 14
Flat ..per doz $2.85 3.60 4.15
Round " 2.10 2.25 2.75

Can.
Delmonico.....per doz. $1 30
Never Slip..... " 0 65

rate.
V. & B..... " 5 75

OUTFITS, COBBLING.

Home.....per doz. $11 50
Economy..... " 4 50
Fireside..... " 10 00

PADLOCKS.

Standard Wrought .....75&10¢
Champion .....50¢
Eureka.....40, 10&5¢
Yale .....60&5¢

PAILS.

Cream.
14-qt., without Ga....per doz. $2 50
20-qt., " " .... " 3 00
20-qt., with Gauge.... " 3 50

Sap.
10-qt., Galvanized.....per doz. 1 75
12-qt., " ..... " 2 00

Stock
Galvd. qts. 14 16 18 20
Per doz.....$3.75 4.00 4.75 5.25

Water.
Galvanized, qts 10 12 14
Per doz $1 75 2.00 2.35

Wood.
Cable, 2-Hoop..... .per doz. $1 70
" 3-Hoop..... " 1 90
Cedar, 3-Hoop..... " 2 85
Standard, 2-Hoop..... " 1 60
" 3-Hoop..... " 1 80

PANS.

Dripping.....60&5¢

Fry.
Common.....75&10¢
Acme .....70¢

Roasting.
Paxton.
Nos..... 1 2 3 4
Per doz.. $4.75 $5.75 $6.50 $7.50
Neverburn.. 4.00 4.50 5.50 6.50
Savory No. 200 .....per doz 8.50

PAPER.

Building.
Plain .....per 100 lbs. $1 10
Tarred..... " 1 20
Tarred Felt..... " 1 65
No. 20, Red Rosin.....pr roll 40
No. 30, Red Rosin ..... " 55

Sand and Emery.
Challenge.....50&10¢
B. & A.....50¢

Wrapping
Drab Floer.....per ℔. 3½
Rag..... " 2

PARERS

Apple.
Bay State.....per doz. $13 00
Turntable ..... " 00
White Mountain .... " 4 75
Reading..... " 6 50

Potato.
Goodsell's Saratoga 10½ in. doz. 6 50
" " 5 in.. " 5 50

PICKS.

Adze Eye Ore .....65&7½%
Drifting and Poll Picks.....65&7½%
Extra Railroad .....65&7½%
Surface.....65&5%

PINCERS.

Carpenters', cast steel.
In..... 6 8 10 .12
Per doz...$1 80 $2 40 $2 80 $3 50
Blacksmith's 45%
Heller's 40%

PINS.

Clothes.
Common.....per box of 5 gro. $0 52
Hoyt's..... " " 31
U. S..... " " 70

Picket.
Fluted 15 in.....per doz. $0 70
" 21 in..... " 1 60
Spiral 1 90

PIPE.

Conductor.
Territory.
Eastern.....60&30%
Central.....70%
Southern.....65&10%
Western.....65&10%
Southwestern.....60½&7½%

Lead.
Full coils.....per ℔. 7½c
Cut " ..... " 7¾c

Stove.
Acme—In. 5 6 7
Smooth, per jt.. 8½c 9½c 10½c
Planished " .. 32 c 33 c 42c
Peerless—Smooth. 7½c 8 c 9½c
Polished 14½c 15½c 18c
Planished 28 c 31 c 35½c
Made-up—In. 5 6 7
Smooth 7½c 8c 9½c
7 to 6 in. Smooth Tapers, pr jt..13c
6 in. Smooth T's..... " ..27c
7 to 6 in. Planished Tapers.....45c

Yale Patent Lock Pipe—Stove.

	5"	5½&6"	7"	7 to 6"
	—Cents—			
Battle Ax Blue Smooth Steel.	6	6½	7½	8
Double Lock Peerless Blue Smooth Steel.	6½	7½	8½	8¾
Can't Slip Blue Smooth Steel.	6½	7½	8½	8¾
Duplex Polish'd Blue Smooth Steel.....	8½	9½	10½	10¾
Yale Russia Fin	15½	16½	17½	17¾
Plan'h'd Duplex	29½	30½	37	38
Galvano, Galvanized Iron..	15	16	17	17½

If wanted made up, add per joint for grooved, 1c; riveted, 1½c. Crating made-up pipe extra.

Wrought Iron Gas Pipe
⅛@½-in., black.....discount, 60%
⅝@½-in. ..... " 60,10&5%
¾-in. to 6-in., black... " 70%
7 " 12 " .. " 62½%
⅛@½ galvanized " 42%
⅝@½ " " 50%
¾ " 6 " " 57½%
7 " 12 " " 45%

PLANES.

Sargent Iron Bench.....60&10%
Stanley Iron Bench.....25&10&5%

PLANTERS.

Corn.
Monitor.....per doz..$7 75
Triumph..... " .. 6 00
Segment..... " .. 9 00

Potato.
Acme.....per doz..$6 25
Challenge..... " ..11 00
Pingree..... " .. 2 25
Eureka ..... " .. 6 25

PLATES, TIN.

See Metals in Column 1.

PLIERS.

Button's—In. 4½ 6 8 10
Per doz.....$2.75 $3.35 $4.15 $5.15

Button's Pattern.
In. 4½ 6 8 10
Per doz.....$2.15 $2.40 $2.90 $3.75

Cutting.
Bernard's.....30%
Lodi.....50%

End and Diagonal Cutting.
Swedish Side 70%
Utica Drop Forge & Tool Co....50%

Fencing.
Farmers' Choice....per doz ..$8 00
Russell's..... " .. 8 25

Flat and Round Nose.
Bernard's.....30%
German 65%
Lodi.....50%
Paragon.....50%

Gas—In. 6 8 10 12
Per doz...$3.35 $3.00 $4.00 $5.00

Tinner's.
Hollow.....40%
Solid.....each..5½c

PLUMBS AND LEVELS.

Common.....70&10%
Cook's.....40%
Davis' Iron.....25%
Davis' Inclinometer.....15%

Stanley's.
Nos. 00 0 2 3
Per doz..$4.50 $5.00 $7.35 $8.40
Nos. 30 25 50 35
Per doz.$12.00 $17.00 $17.00 $12.00

POINTS.

Drive Well Points.....75&10%

POKERS—STOVE.

Wr't Steel, str't or bent, pr doz.$0.55
Wr't Steel, wood hand'l's " " .80
Nickel pl'td, coil hdl's.. " " .65

POKES—ANIMAL.

Brown's, wr't steel, per doz.$5.00@6.00

POLISH.

Metal.
Pride of the Bar.....$1.60
Putz Cream.
Pts. 1-6 ¼ ½
Per doz.....$0.80 $1.10 $1.65
Pts. 1 2 4 8
Per doz $2 75 $4.50 $7.50 $12.50
White Silk half pints, per doz.$2.00
White Silk, 6 oz. cans, per doz. 1.00
Wondershine
Pts. 1-6 ½ 1 2
Per doz.....$0.70 $1.35 $2.25 $3.00

George William Hoffman.
U. S. Metal Polish Paste, 3 oz. boxes, per doz., 50c; pr. gro..$4.55
½-lb. boxes, per doz..... 1.20
1-lb. boxes, per doz 2.25
U. S. Liquid, 8 oz. cans, per doz., $1 25; per gro.....12.00
Barkeepers' Friend Metal Polish, per doz., $1.75; per gro..18.00

Shoe.
M. D. C.....per doz. 36c@50c
F. C. O..... " 40c
T. M..... " 55c@$1.75
Imperial.....per gr.....$5.00

Stove.
Black Eagle, 1 ℔ cans. pr gr..$15.00
Black Silk—
5 ℔. pail.....$0 70
Paste, 5 oz. cans....per doz. 75
Paste, ½ lb. cans.... " 1 00
Liquid, ½ pint cans..per doz $1 00
Liquid, 6 oz. cans... " 75
Steel Range Gloss.... " 1 75
Blackene, 1 ℔ cans....pr gro. 13 00
Black Jack, ½ ℔ cans.. " 9 25
Dixon's Carb. of Iron.. " 5 75
Nickel Plate..... " 4 50

POPPERS, CORN.

Round or Square, 1 qt. per dz, ..$ 95
Square, 1½ qt..... " 1 10
Square, 2 qt..... " 1 25
2 qt. Reversible..... " 1 60

POTS, FIRE.

Bernz.....each $3 85
Clayton & Lambert's, ea..$4 75@6 25
Gate City.....each 6 25
Gem.....ea..$6 75@8 50

POWDER.

See Ammunition.

PRESSES, FRUIT AND JELLY.

Enterprise Manufacturing Co....25%
Henis.....per doz. $1 85

PRIMERS.

See Ammunition.

PRUNERS.

Disston's Pole.....per doz. $6 50
Henry's Improved..... " 75&10%
Water's Improved..... " 80%

PULLERS.

Cork.
Daisy.....each $3 10
Phoenix..... " 1 40
Quick and Easy..... " 2 70

Nail.
Giant.....per doz..$10 50
Giant Pattern..... " .. 6 00
Jumbo ..... " .. 9 00

Tack—Giant ..... " .. 40

PULLEYS.

Awning—Jap'd.....60%
Clothes Line.....50&10%
Hay Fork.
Iron Wheel, 5 in.....per doz. $1 75
Wood Wheel, 6 in.... " 1 75
Wood Wheel, 6 in., pass knot..... " 2 15
Hot House—Jap'd .....50&10%
Screw..... " 60%
Side ..... " .....50&10%
Sash.
Clark's .....per doz $0 36
Common Sense, 2 in .. " 22
" Pattern, 2 in.. " 20
Empire..... " 20
Ideal..... " 20
Steel..... " 25

PUMPS

Pitcher Spout.
Nos. 1 2 3 4
Each .....$.93 1.05 1.17 1.45

Spray.
Blizzard.....per doz. $14 50
Cyclone, tin..... " 3 40
" copper ..... " 6 75
Daisy..... " 9 00
Little Giant.....each 2 25

PUNCHES.

Conductors'.
No. 22.....per doz. $2 25

Machine.....per ℔. 19

Saddlers'.
Common.....per doz. 60c@70c
Good..... " 72c@84c

PUTTY.

In Bladders.
Strictly pure.....per 100 ℔s. 2 35

RAIL.

Barn Door.
Crescent T..... 4½c
Double Flange..... 2½c
Matchless, 1 in..... 3c
Match'ess, 1½ in 3½c
Storm King..... 4c
World's Best 7c

Sliding Door
Painted steel.....per ft. 4½c
Bronzed wrought iron... " 8½c

RAKES.

Coal or Wood.....per doz. $5.20

Garden.
Steel .....75&10%
Steel, bow.....75&7½%
Malleable Iron, heavy.....70&10%

Hay.
Wood.....$1.50@$3 00

Lawn—Wood.
XXX.....per doz. 3 00
Automatic ..... " 6 00
Hustler ..... " 3 50
Jumbo, 36 teeth..... " 6 00

RASPS—See Files.

RAZORS.

Bo-ras-ic 50%
Red Devil.....50%
Tree Brand 50%

REGISTERS.

List December 5, 1904.

Black and White Japanned. 70%
Nickel Plated 70%
Electroplated, Brass, Bronze or Copper 70%

RINGS

Bull.
Copper ..... 2½ in 3 in.
Per doz..... $1.10 $1.35
Rea's Impro'd Self Piercing copper, pr d'z. 1.85
Steel per doz.. .85 .95
Nickel Plated 1.35 ...

and Ringers—Hog.
Blair's Rings .....per doz. $0 58
Blair's Ringers..... " 75
Brown's Rings..... " 50
Brown's Ringers..... " 80
Champion Ringers... " 1 60
Hill's Ringers..... " 70
Hill's Ring, boxes..... " 47
Major Rings ..... " 60
Perfect Ringers..... " 95
Wolverine Rings..... " 1 40
Wolverine Ringers... " 80

Fruit Jar
White.....per ℔ 30c

Key
Split, round. .....per doz. 17c
Split, square..... " 32c
Ball, Round..... " 32c

RIVETS.

and Burrs.
Copper Belt 30%
Coppered Iron 75%
Tinners' 70%

Hame ..... per ℔. $0 10

Slotted Clinch.....per doz. 40c@45c

Tubular
Nos 1 and 2 assorted sizes, doz. 45c

RIVET SETS.

See Sets.

ROPE.

Cotton.
¼, 5-16-in. Com. on reels. per ℔. 11½c
¼, 5-16-in. Com. in coils .. " 12c
¼, 5 16 Imperial in coils . " 21c

Sisal
Rates 10½c
Premier rates .....per ℔. 8½c

Pure Manila.
Rates.... ..... " 13½c
Premier, rates .... " 12½c

RULES

Boxwood.....60&5%
Ivory.....45&5%

SASH WEIGHTS.

See Weights.

SAWS.

Back.
Atkins'.....40%
Disston's .....30&5%
Jackson's.....30&5%

Butchers'.
Atkins' Nos. 1, 2, 3, 5, 7.....40%
Atkins' Nos. 77, 78.....60%
Atkins' No. 79.....50&5%
Disston's.....40&5%

Circular.
Atkins'.....50%
Disston's.....50%
Hiles'.....50&10%

Compass.
Atkins' Nos. 2 & 3 .....40%
Atkins' Nos. 4 & 5.....40&10%
Common.....per doz. $1.35@$1.60
Disston's.....35&7½%

Cross-Cut.
Atkins'.....35&40%
Disston's..... 40&10% &50%

Dehorning.
Atkins'.....per doz. $5 50
Disston's..... " 5 75

Hack.
Atkins'.....40%
Disston's.....35%
Keystone.....30%

Hand and Rip.
Atkins'.....40%
Brown's .....30&7½%
Disston's No. 7.....30&10%
Disston's Nos. 8, D8, 12, 76, 112, D100, and 120 (new list) 25&10%
Keystone.....35&5%
Enterprise, hand.....per doz. $5 00
Our Saw, hand..... " 4 00
Our Saw, rip..... " 4 50

Keyhole—Disston's.....30&5%
Atkins' No. 5.....40&10%
Atkins' No. 6.....40%

Kitchen.
Atkins'.....50&10%
Sterling.....25%

One Man 50%

Panel.
Atkins'.....40&10%
Brown's.....30&7½%
Disston's No. 7.....35&5%
Disston's No. D100.....30&5%

Pruning.
Atkins' Nos. 1, 2 & 3.....35%
Atkins' Nos. 5, 6 & 7.....40%
Brown's.....25&7½%
Disston's.....30&5%

Wood.
Atkins'..... .....40&10%
Common.....per doz. $4 50
Clover Leaf..... " 6 50
No. 44 Bishop..... " 6 50
Perfection ..... " 8 00
Crescent..... " 5 00

SAW BUCKS—See Bucks.

SAW SETS—See Sets.

SAW TOOLS—See Tools.

SAW FRAMES.

Common, plain.....per doz. $1 25
" painted.... " 1 70

SCALES.

Counter.
Pelouze..... .....40&10%

Platform.
Osgood.....50%

SCOOPS.

Grain.
½ Bu. "Hercules,"..per doz. $13 75
1 " " " 15 00

SCRAPERS.

Box.
Stanley's Adjustable, per doz.$3 00
Triangular..... " 4 00

Cabinet.
Cast Steel..... " 60c@75c
Stanley's No. 80..... " $7 80

Road.
Cubic ft. 7 5 3
Without runners, ea.$4.00 3.75 3.50
With runners.... " 4.25 4.00 3.75

SCREWS.

Bench.
Iron, in,..... 1 1½ 1¾
$3.25 $3.75 $4.50
Wood, white maple..per doz. $3 50

Hand—Wood.....20&5%

Hand Rail.....60&10%

Jack .....70&10%

Lag or Coach—all sizes, gimlet pointed.....75&5%

Saw—Centennial.
Nos. 1 2 3 4 5 6
Per doz. 18c 20c 26c 30c 23c 25c

Wood.
F. H. Bright.....87½&10&5%
R. H. Blued..... 85&10%
F. H. Jap'd.....82½&10%
F. H. Brass.....85&10%
R. H. Brass.... . .....80&10%
R. H. Nickel Plated.....80%

SCYTHES.

Clipper, grain.....per doz. $9 50
Clipper, grass ..... " 6 75
Vulcan. ..... " 6 50
Honest Dutchman..... " 6 50
Be Ve B..... " 8 00

SHAVING SETS.

Smith & Hemenway.....60%

SETS.

Nail.
Round, common.....per doz. $0 33
Square, " ..... " 42
Octagon " ..... " 33
No. 5 Square,..... " 75
Cup Point, knurled, pr. doz..... 75
Rivet.
Farmers'.. .....per doz. $1 20
Tinners'.....50&10%
Saw.
Aiken's Pattern.....per doz. $3 50
Common Lever..... " 1 20
Disston's Monarch... " 6 50
" X Cut..... " 12 00
German ..... " 1 05
Morrill's Old Style... " 5 00
" Pattern.... " 3 25
Leach's..... " 4 80
Nash's Hand..... " 3 15
" X Cut..... " 4 20
Stillman's Lever..... " 1 30
" X Cut..... " 2 50

SHARPENERS, SKATE.

Diamond.....per doz. $1 60
Smith & Hemenway.....20%

SHAVES, SPOKE.

Iron.....per doz. $1.10@$1.85
Wood..... " 2.75@ 4.75
Bailey's.....50&5%
Goodell's.....15%
Stanley's Universal.....30&5%

SHEARS.

Pruning.
Buckeye, No 1.....per doz. $5 75
" No. 2..... " 7 40
California Pat.. 9 in . " 3 20
" " 10 in.. " 4 00
Draw Cut, No. 3..... " 13 75
" " No. 4..... " 16 50
Henry's Pat. 0 01 14 012
Per doz.....$1.40 $2.10 $2.90 $2.80
Star.....per doz. $4.00
Sheep—No. BBA.
Inches..... 6 6½ 7
Reg. Grip..... $11.25 $11.50 $12.00
Nar. Grip, doz. 11.00 11.25 12.25
Tinners'—See Snips.

SHEAVES, SLIDING DOOR.

Common.
Inches..... 3 4 5
Per set..... $0.34 $0.42 $0.70
Hatfield's.
Per set..... .75 1.00 1.60

SHELLS—See Ammunition.

SHELLERS, CORN.

Union..... per doz. $6.75

SHIELDS.

Expansion Bolt Shields.....50&10%

SHOES.

Conductor .....60&10%

SHOE POLISH—See Polish.

SHOT—See Ammunition.

SHOVELS AND SPADES.

Coal.
No. 2 Woodford .....per doz. $5 50
No 182. ..... " 6 00
Ames' new list.....Discount 12½%
Per Doz.
Neverbreak, hollow bck, blk .$15 75
National.... " " " 14 75
Buckeye.... " " " 10 00
Mohawk.... " " " 9 00
Drain.
Iwan's Perfection.....50%
Railroad, Etc.
Black Diamond.....per doz $10 50
Crescent..... " 5 75
Keystone..... " 8 75
Star..... " 4 75
Vaterland..... " 9 50
Hollow Back..... " 4 75
Ames' new list..... Discount 12½%
Snow.
Per doz.....$1.65@$9.00
Alaska Steel.
D Handle.....per doz. $3 50
Long Handle..... " 3 00

SINKS.

Cast Iron.
Painted..... 60%
Enameled, White..... 60%
Wrought Steel.
Painted, new list.....40-10&5%

SLEDGES—See Hammers.

SNAPS, HARNESS.

Champion.....33⅓%
German Pattern. .....30&5%
Judd's Pattern.....50%

SNATHS.

Double Ring, Bush.....per doz. $6 50
Patent Loop " .... " 6 00
" " Grass..... " 5 75

SNIPS, TINNERS'.

Wiss.....40&10%
National.....40&10%

SOLDER—See Metals.

SPRINGS, DOOR.

Perfect.
Nos..... 1 2 3 4
Per doz.... 30c 35c 40c 45c
Reliance.
Per doz.....light $1.25; heavy $2 50
Star.
Per doz..... light 90c; heavy $1 35
Torrey's.....per doz. $1 35
Warner's No..... 11 13
Per doz..... 75c $1.35

SQUARES.

Steel and Iron..... .....75%
(Add for Bluing, $2.50 per doz., net)
Miter.
Stanley's No. 12 ... .60%
Try.
Stanley's No. 20, new list. .45&10%
" No. 12 and 14.....55%
Try and Bevel.
Stanley's..... .....55&5%
Try and Miter.
Fox's.....per doz. $5.75
Winterbottom's 70%

SQUEEZERS, LEMON.

Common Wood.....per doz $0 70
Porcelain Lined, Wood. " 1 25
Boss, malleable iron.... " 75
Iron Frame, p'rel'n bowl " 2 25
" glass bowl... " 2 50
Little Giant, tin'd iron. " 4 00
Drum. japanned..... " 5 00
Drum, nickel plated.... " 4 50

STAPLES.

Blind.
Barbed.....per lb 9½@9½c
Butter Tub..... " 8@8½
Fence—less than carload.
Polished.....per 100 lb $2 30
Galvanized..... " 2 60
Netting.
Galvanized.....per 100 lb 4 00
Wrought.
Wrought Staples, Hasps and Staples, Hasps, Hooks and Staples, and Hooks and Staples.....85&10%
Extra heavy.....85%

STEELYARD.

Discount 30%

STONES.

Axe.
Hindostan.....per lb 5½@7c
More Grit ..... " 9½c
Washita..... " 17 c
Emery.....60%@60&5%
Oil—Mounted.
Arkansas Hard.....per doz. $22 00
Arkansas Soft..... " 15 50
Hindostan .....per lb 6½@6½
Oil—Unmounted.
Arkansas Hard.....per lb $2 05
Arkansas Soft..... " 1 10
Lilly White..... " 45
Queer Creek..... " 15
Ouachita ..... " 38
Washita ..... " 28
Sythe.
Black Diamond.....per gro. $8 00
Crescent ..... " 4 25
Gem Corundum..... " 7 50
Green Mountain..... " 4 50
La Moille..... " 7 00
Quinnebog..... " 5 00
Red End..... " 3 75

STOPS, BENCH.

Hotchkiss'.....per doz. $3 50
Stearns'..... " 4 75

STOPPERS, FLUE.

Common.....per doz. $0 40
Crown..... " 45
Gem, flat, painted..... " 85
Gem, cor'd, decorated.. " 70
Kirch's'..... " 90
Perfect ..... " 70@85
Skinner's Common Sense " 80

STOVE PIPE—See Pipe.

STOVE BOARDS—See Boards.

STOVE POLISH—See Polish.

STRAPS.

Scoop.....per doz. prs. $1 85
Skate..... " " 60@70c

STRETCHERS.

Carpet.
Bullard's.....per doz. $3 90
Exelsior ..... " 5 25
Malleable Iron..... " 70
Perfection..... " 6 30
King..... " 4 50
Wire.
N. S. Elwood's..... " 6 00
O. S. Elwood's..... " 6 00
Little Giant..... " 5 75
Safety ..... " 10 00
Star Lever..... " 6 25
Canton Tackle Block. " 9 50
Warner's ..... " 6 25

SWIVELS.

Malleable Iron.....per lb 07
Wrought Steel.....per gro. $4 50

TACKS.

American Cut.....90&20%
American Wire.....85&25&10%
Bill Posters Cut .....90&20%
Blued Carpet.....90&10%
Tinned Carpet.....90&10%
Gimp.....90&10%
Upholsters' Cut .....90&20%
Upholsters Wire.....90&10%
Double Pointed.....90&20%
Copper.....per lb 32c
Canvas Nails.....75&5%
Clout Nails .....75&5%
Hungarian Nails.....60&5%

TAPES, MEASURING.

Asses' Skin.....40&10%
Bend Leather.....20%
Patent Leather.....20%
Lufkin's Steel.....25%
Lufkin's Metallic.....30%

TEE BEVELS—See Bevels.

THERMOMETERS.

Tin Case.....per doz. 80c@$1 25
Wood Back..... " $2.00@12 00
Glass..... " 12 00

TIES.

Bale.
Single Loop.....80&10%
All other kinds.....70%
Cow—See "Chains."

TOOLS, SAW.

Atkins' Dexter.....per doz. $4 50
Atkins' Excelsior..... " 6 50
Disston's Universal.....40%
Miniature.
Smith & Hemenway.....25%

TRAPS.

Fly.
Balloon.....per doz. $1 15
Harper's..... " 1 25
Game.
Newhouse.....40&10%
New Victor.....70&10%
Mole.
Reddick's.....per doz. $6 00
Mouse and Rat.
Wood Choker...per doz. holes $0 10
Tin Choker..... " " 10
Delusion.....per doz. 1 00
Marty Rat..... " 6 00
Marty Rat Imitation.. " 3 50
Marty Mouse..... " 3 00
Marty Mouse Imitation " 2 00

TROWELS.

Brick.
Clover Leaf.....40%
Brade's.....15&5%
Disston's.....30%
Rose's.....25%
Plasterers.
Clover Leaf.....40%
Disston's.....25%
W. & McP.....25%

TRUCKS.

Bag.....each $2 75
Handy..... " 1 85
Warehouse.....50&10%

No.	1	2	3
Half Ironed....	$3.00	$3.85	$5.50
Full Ironed....	3.45	4.50	6.45

TUBS, WASH.

Standard.				Ex.
Nos.....	3	2	1	large
Per doz....	$5.00	$6.00	$7.00	$ 9.50
Dowell.				
Per doz....	5.35	6.35	7.00	9.50
Cedar.				
Per doz....	6.10	7.10	7.90	10 80
Indurated.				
Per doz....	8.55	9.45	10.80	13.50
Galvanized.				
No.....	1	2	3	
Per doz.....	$5.25	$6.35	$7.50	

TWINE.

Per lb
3-ply Cotton Wrapping.....25c
4 " " " 25c
4 " " Extra Wrapping.....27c
4 " " " Hvy. Wrapping..35c
4 " " Wrapping on tubes...27c
3 " " " cones...25c
4 " " " " " ...25c
India Hemp, ¼-lb. balls.....17c
" " ½-lb. " 16c
" " ¼-lb. " .....doz. 63c
2-ply " ½-lb. " 11c
3-ply " ½-lb. " 10c
Jute Wrapping, ½-lb. balls.....14c
Jute Wool, 1-lb. balls.....8½c
Seine.

Nos.....	9	12	15+
Soft.....per lb	26½	26	25
Med..... "	26½	26	25
Hard..... "	27	26½	26

Staging, ½-lb. ball, size 21.....26½c
" " " " 24.....26c
" " " " 27.....26c
Bagging " 23c
3-ply "B" in hanks.....18c
4 " "B" " 18c
3 " "A" " 27c
3 " Silver Finish, in hanks....37c
Fodder or Lath.
130-strand 6½c
200 strand. 7½c

VISES.

Phœnix.....35%
Cheney's 20%
Parker's Oval Slide.....50, 10&2½%
Sargent's Oval Slide,

In.	2½	3	3½	4½
Ea.	$1 00	$1 25	$1 65	$2 00

Parker's Parallel.....18&20%
Parker's Victor.....15%
Parker's Combination.....75%
Solid Box.....50%
Adam's Mechanics'.....each 2 50
Williamson Universal.....60%

WARE.

Stove Hollow Ware.
Plain or Unground 60%
Ground Ware.....50&10%
Enameled Ware.....50%
Country Hollow Ware, per 100 lbs $2.75
White Enameled Ware.
Maslin Kettles.....60&10&10&5%
Covered Ware, Tinned and Turn'd.40%
Enameled 50%
Glue Pots, Tinned.....30%
Enameled.....35%
Enameled.
Cherry Blossom and Chrysolite.50%

WASH BOARDS—See Boards.

WASHERS.

Standard O. G. cast iron...per lb. 2½c
Wrought iron in bulk per lb.:

In.	½	⅝	¾	⅞	1
	9c	6½c	5c	4½c	4½c	4½c	3½c

Wrought steel in 5 lb. boxes, per lb.

In.	½	⅝	¾	⅞	1
	10c	7c	6c	5½c	5c	5c	4½c

WASHING MACHINES—See Machines.

WEDGES.

Ax.....per doz....30
Galling ....per lb 10¾
Saw ..... " 8¼

WEANERS.

Calf.
Fuller's, per doz.....$2 00 to $2 50
Tyler's Safety, per doz 1 85 to 2 40
Carroll's, per doz..... 3 00 to 3 75
Standard, per doz..... 3 00
Hoosier, per doz..... 3 50 to 4 60

WEIGHTS.

Hitching .....per lb 2½c
Sash—F.O.B. Chicago...pr ton $24 50

WHEEL BARROWS.

Common Railroad....per doz..$15 50
Heavy " .... " .. 20 00
Panama Steel Tray " .. 35 00
Klondike " " .. 23 50
No. C4 Tubular " 43 Bryan..each 4 60
No. C5 " " 45 " " 5 25

WHEELS.

Corundum .....70&10&5%
Emery.....75&5%
Well

In.	8	10	12	14
Per doz.....	$2.10	$2.50	$3.15	$5.00

WIRE.

Barbed	Painted.	Galv'd.
Carloads..per 100 lbs..	$2.35	$2.65
Less than car " ..	2.40	2.70

Brass.
In coils.....20%
In 1 lb spools, new list.....50&10%
Broom—Tinned.....60&10&10&10%
Cable—Same price as Barbed Wire.
Copper.
In coils.....20&10%33⅓%
In 1 lb spools, new list .... 50&10%
Fence—Smooth.
Nos. 6 to 9, An'eal'd, pr 100 lbs. $2.15
Nos. 6 to 9, Galvl'd... " 2.45
Hair—New list.....50&10%
Market.
Bright, full bdles.....70&5%
Bright, broken bdles.....70%
Coppered, full bdles..... 70%
Coppered, broken bdles.....65&10%
Tinned, full bdles.....70&5%
Tinned, broken bdles.....65&10%
Picture—In coils.....80%@80&10%
In 5 lb. spools. .....per lb..26c
Plain—Small lots..... $2.10
Car lots 2.05
Small spools 5c per hundred higher.

WRENCHES.

Acme Standard.....60%
Alligator No. 1.....85c net
Always Ready.....50&10%
Coe's Standard.....40&10&5%
Agricultural.....75&10%
Ellis Adjustable.....25%
Malleable "S".....per lb. 06c
Malleable..... " 06c
Stillson Pipe.....70%
Trimo " .....65&10%

WRINGERS.

No. 22, Guarantee....per doz.$32 50
No. 110, Guarantee.... " 32 50
No. 110, Brighton..... " 23 50
No. 110, Bicycle ..... " 31 50
No. 500, Royal . ..... " 32 50
No. 350, Universal.... " 28 00
No. 300, Novelty..... " 28 00
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No. 15, Star..... " 16 50

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Reeves Mfg. Co., Canal Dover, O
Schoedinger, F. O., Columbus, Ohio
St. Paul Roofing, Cornice & Ornament Co., St. Paul, Minn

Copper and Brass

Hungerford, U. T., Brass & Copper Co., New York, N. Y
Plume & Atwood Mfg. Co., Chicago

Corn Cribs

Denning Wire & Fence Co., Cedar Rapids, Ia

Cornices

Berger Mfg. Co., Canton, O
Canton Mfg. Co., Canton, O
Edwards Mfg. Co., Cincinnati, O
Eller Mfg. Co., Canton, O
Schoedinger, F. O., Columbus, O
St. Paul Roofing, Cornice & Ornament Co., St. Paul, Minn

Cornice Brakes

Bertsch & Co., Cambridge City, Ind
Niagara Machine & Tool Wks., Buffalo, N.Y

Cutlery

Gillette Sales Co., New York, N. Y
Hotchkiss, Edward S., Bridgeport, Ct
Smith & Hemenway, Co., New York
Weiss, L. T. Brooklyn

Cut Offs—Rain Water

Cooney & Geiger, Indianapolis, Ind
La Crosse Steel Roof. Co., La Crosse, Wis

Dampers

Sayre Stamping Co., Sayre, Pa

Door Hangers

Safety Door Hanger Co., Ashland, O

Eaves Trough

Canton Mfg. Co., Canton, O
Eller Mfg. Co., Canton, O
Garry Iron & Steel Co., Cleveland, O
La Crosse Steel Roof. Co., La Crosse, Wis
Schoedinger, F. O., Columbus, O
St. Paul Roofing, Cornice & Ornament Co., St. Paul, Minn
Whitacre Mfg Co., J. E., Rockford, Ill

Elbows—Conductor Pipe

Dieckmann, F., Cincinnati, O
Eller Mfg. Co., Canton, O
Reeves Mfg. Co., Canal Dover, O
Wheeling Corrugating Co., Wheeling, W. Va

Elbows—Stove Pipe

Reeves Mfg. Co., Canal Dover, O

Electro Plating Outfits

Hanson & Van Winkle Co., Chicago, Ill

Elevators

Kimball Bros. Co., Council Bluffs, Ia

Enameled Ware

Briscoe Mfg. Co., Detroit
Lisk Mfg. Co., Canandaigua, N. Y
Reed Mfg. Co., Newark, N. Y
Republic Metalware Co., Buffalo, N.Y
Star Enameling and Stamping Co., Pittsburgh, Pa

Enameling and Stamping Plants

Vollkommer & Co., Pittsburg

Engineers & Contractors

Vollkommer & Co., Pittsburg

Eye Shades

Texas Co., The, Chicago, Ill

Firearms

Stevens, J. Arms & Tool Co., Chicopee, Falls, Mass

Fishing Tackle

Enterprise Mfg. Co., Akron, O

Fencing—Wire

Cyclone Fence Co., Waukegan, Ill
Denning Wire & Fence Co., Cedar Rapids, Ia
Pittsburgh Steel Co., Pittsburgh, Pa

Fences—Iron

Stewart Iron Works Co., Cincinnati, O

Files

Carver File Wks., Philadelphia, Pa
Disston Henry & Sons, Philadelphia, Pa

Forming Rolls

Bertsch & Co., Cambridge City, Ind
Niagara Mch. & Tool Wks., Buffalo, N.Y

Foundry Supplies

Obermayer, S. Co., Cincinnati, O
Paxson, J. W. Co., Philadelphia Pa

Furnaces—Hot Air

American Furnace Co., St. Louis, Mo
Beckwith, Estate, P. D. Dowagiac, Mich
Boynton Furn. Co., New York & Chicago
Detroit Heating & Lighting Co., Detroit, Mich
Forest City Fdy. & Mfg. Co., Cleveland, O
Green Fdy. & Furn. Wks., Des Moines, Ia
Haynes-Langenberg Mfg Co., St. Louis
Henry & Scheible Co., Cleveland, O
Hess, Snyder Co., Massillon, O
Kelsey Heating Co., Syracuse, N. Y
Magee Furnace Co., Boston
Mannen & Esterly Co., Cleveland, O
March-Brownback Stove Co., Pottstown, Pa
Meyer Furnace Co., Peoria, Ill
Monroe Fdy. & Furn. Co., Monroe, Mich
Mueller, L. J. Furn. Co., Milwaukee, Wis
Quaker Mfg. Co., Chicago
Richardson & Boynton Co., Chicago
Robinson Furnace Co., Chicago
Schwab, R. J. & Sons Co., Milwaukee, Wis
Smith & Anthony, Boston, Mass
Stanton Heater Co., Martin's Ferry, O
Stove & Range Co., (The) of Pittsburgh, Pittsburgh, Pa
Van, John, Range Co., Cincinnati, Ohio
Youngstown Furn. & Supply Co., Youngstown, O

Furnace Pipe and Fittings

Green Fdy. & Furn. Wks., Des Moines, Ia
Meyer, F. & Bro. Co., Peoria, Ill
Michigan Safety Furnace Pipe Co., Detroit, Mich
Mueller, L. J. Furn. Co., Milwaukee, Wis
Smith Co., Charles, Chicago

Furnace Rings

Walworth Run Fdy Co., Cleveland, O

Gas Appliances
Adler, H. Co., Carnegie, Pa
Oakman Mfg. Co., New York

Hand Screws
Grand Rapids Hand Screw Co., Grand Rapids, Mich

Hand Punching Machines
American Lock Nut Co., Oregon, Ill

Hangers—Garment
Pullman Mfg. Co., Rochester, N.Y

Hardware Jobbers
Clark, Quien & Morse, Peoria
Paxton & Gallagher Co., Omaha

Hardware Specialties
Arcade Mfg. Co., Freeport, Ill
Carver File Co., Philadelphia, Pa
Enterprise Mfg. Co. of Pa., Philadelphia, Pa
Pritchard-Strong Co., Rochester, N. Y
Pullman Mfg. Co., Rochester, N. Y
Roseland Can & Specialty Co., Rockford, Ill
Taylor & Boggis Fdy. Co., Cleveland, O

Heater Combination
Smith, Chas., Co., Chicago
Stolz, F. D., Chicago, Ill

Heating
Detroit Heating & Lighting Co., Detroit, Mich
Quaker Mfg. Co., Chicago

Hinges
Griffin Mfg. Co., Erie, Pa

Hollow Ware
Avery Stamping Co., Cleveland, O
Sperry, D. R. & Co., Batavia, Ill

Ice Cream Freezers
North Bros. Mfg Co., Philadelphia. Pa
Richmond Cedar Wks., Richmond, Va

Industrial Plants
Vollkommer & Co., Pittsburgh, Pa

Iron Fence
Stewart Iron Works, Cincinnati, O

Kitchen Utensils
Avery Stamping Co., Cleveland, O

Ladders—Shelf
Calander, John, St. Paul. Minn

Levels
Baker-McMillen Co., Akron, O
Davis & Cook, Watertown, N. Y
Stanley Rule & Level Co., New Britain, Ct

Lighting Systems
Detroit Heating & Lighting Co., Detroit, Mich
Ideal Epworth Acetylene Co., Johnstown, Pa.

Lightning Rods
Security Lightning Rod Co., Burlington. Wis
Maher & Son, Preston, Iowa

Locks
Yale & Towne Mfg. Co., New York, N.Y

Mail Boxes
Blick-Williams Co., Indianapolis, Ind
Signal Mail Box Co., Joliet, Ill
Smith Bros. Mfg. Co., Chicago, Ill

Metal Lath
Wheeling Corrugat'g Co., Wheeling, W.Va

Metal—Perforated
Harrington & King Perforating Co., Chicago, Ill

Metal Polish
A-B Stove Polish Co., Chicago
Hoffman, Geo. W., Indianapolis, Ind

Metal Shingles
Burton, W. J. Co., Detroit, Mich
Edwards Mfg. Co., Cincinnati, O
Cortright Metal Roofing Co., Philadelphia
Nat'l Sheet Metal Roof. Co., Jersey City
Wheeling Corrugating Co., Wheeling, W. Va

Mica
Munsell, Eugene & Co., Chicago

Miters
Whitacre, J. E. Mfg. Co., Rockford. Ill

Mop Wringers
Eagle Cooperage Wks., Circleville. O

Nails and Tacks—Copper
Hungerford, U. T., Brass & Copper Co., New York
Standard Horse Nail Co., New Brighton. Pa

Nickel Plating Plants
Hanson & Van Winkle Co., Chicago

Nuts
American Lock Nut Co., Oregon, Ill
Columbus Bolt Works, Columbus O
Garland Nut & Rivet Co., Pittsburgh, Pa

Paints
Connors, Wm., Paint Mfg. Co., St. Louis
Dixon, Jos. Crucible Co., Jersey City, N. J
Enterprise Paint Mfg. Co., Chicago

Pencils
Dixon, Jos. Crucible Co., Jersey City, N.J

Perforated Metal
Harrington & King Perforating Co., Chicago, Ill

Photograph Clips
U. S. Clothes Pin Co., Montpelier, Vt

Pistols
Stevens, J. Arms & Tool Co., Chicopee Falls, Mass

Planes
Stanley Rule & Level Co., New Britain, Ct

Pumps
Beckman Bros., Des Moines, Ia
Berger Mfg. Co., Canton, O
Hess-Snyder Co., Massillon, O

Punches
American Lock Nut Co., Oregon, Ill
Bertsch & Co., Cambridge City, Ind
Niagara Mch. & Tool Wks., Buffalo, N.Y
Weiss, H. & Co., New York, N.Y

Radiators
American Radiator Co., Chicago
Rochester Radiator Co., Rochester N.Y

Rasps
Disston, Henry & Sons., Philadelphia, Pa

Razors
Gillette Sales Co., Times Bldg., New York City
Smith & Hemenway Co., New York
Weiss, L. T., Brooklyn, N.Y

Registers
Foster, C. H., Cleveland. O
Henry & Scheible Co., Cleveland, O
Independent Register Co., Cleveland, O
Meyer F. & Bro. Co., Peoria, Ill
Mueller, L. J., Furn. Co., Milwaukee, Wis
Schwab & Sons Co., Milwaukee, Wis
Tuttle & Bailey Mfg. Co., New York

Rifles
Stevens, J. Arms & Tool Co., Chicopee Falls, Mass

Rivets
Hungerford, U. T., Brass & Copper Co., New York, N. Y

Roofing
H. W. Johns-Manville Co., New York, N.Y
Kanneberg Roofing & Ceiling Co., New York

Roofing—Asphalt
Stowell Mfg. Co., Jersey City, N.J

Roofing—Iron and Steel
Berger Mfg. Co., Canton, O
Burton, W. J. Co., Detroit, Mich
Canton Art Metal Co., Canton, O
Edwards Mfg. Co., Cincinnati, O
Eller Mfg. Co., Canton, O
Follansbee Bros. Co., Pittsburgh. Pa
Friedley & Voshardt, Chicago, Ill
Garry Iron & Steel Co., Cleveland, O
La Crosse Steel Roof. Co., La Crosse, Wis
Nat'l Sheet Metal Roof. Co., Jersey City
Niles Corrugating Co., Niles, O
Reeves Mfg. Co., Canal Dover. O
Schoedinger, F. O., Columbus, O
St. Paul Roofing, Cornice & Ornament Co., St. Paul, Minn

Roofing Cement
Garry Iron & Steel Co., Cleveland, O

Roof Paint
Dixon, Jos. Crucible Co., Jersey City, N.J
Garry Iron & Steel Co., Cleveland, O

Rules
Lufkin Rule Co., Saginaw, Mich
Stanley Rule & Level Co., New Britain, Ct

Sash Balances
Pullman Mfg. Co., Rochester. N.Y

Sash Chain, Ribbon & Wire Cord
Pullman Mfg. Co. Rochester, N.Y

Saws and Saw Sets
Disston, Henry & Sons, Philadelphia, Pa
Goodell-Pratt, Greenfield, Mass

Scales
Beckman Bros., Des Moines, Ia

Screens—Perforated Metal
Harrington & King Perforating Co., Chicago, Ill

Screen Door Checks
Pullman Mfg. Co., Rochester, N. Y

Screens—Radiator
Harrington & King Perforating Co. Chicago, Ill

Screws
Columbus Bolt Works, Columbus, O

Screw Drivers
North Bros. Mfg. Co. Philadelphia, Pa

Scuttle Openers
Bickelhaupt, G., Skylight Works, New York, N. Y

Seamless Tubing—Brass & Copper
Hungerford, U. T., Brass & Copper Co., New York

Settees—Iron
Stewart Iron Works, Cincinnati, O

Shears
Bertsch & Co., Cambridge City, Ind

Shears—Sheet Metal
Niagara Mch. & Tool Wks., Buffalo, N.Y
Weiss, H. & Co., New York, N.Y

Sheets—Black and Galvanized
American Sheet & Tin Plate Co., Pittsburgh, Pa
Berger Mfg. Co., Canton, O
Parkersburg Iron & Steel Co., Parkersburg, W. Va
Wheeling Corrugat'g Co., Wheeling, W.Va

Sheets—Planished
Ward-Dickey Steel Co., Indiana Harbor, Ind

Sheets—Steel
American Sheet & Tin Plate Co. Pittsburgh, Pa
Parkersburg Iron & Steel Co., Parkersburg, W. Va
Ward-Dickey Steel Co., Chicago, Ill

Shot Guns
Stevens J., Arms & Tool Co. Chicopee Falls, Mass

Shovels
Avery Stamping Co., Cleveland, O

Sifters
Stuber & Kuck. Peoria, Ill

Skylights
Edwards Mfg. Co., Cincinnati, O
Eller Mfg. Co. Canton, O

Skylight Gearing
Bickelhaupt, G., Skylight Works, New York. N. Y
Weiss, H. & Co., New York, N.Y

Slate
Auld & Conger Co., Cleveland, O
Johnson, E. J. & Co., New York, N.Y

Soldering Furnaces
Blickelhaupt Skylight Works, New York
Burgess Soldering Furnace Co., Columbus, O
Clayton & Lambert Mfg. Co., Detroit
Turner Brass Works, Chicago, Ill

Sporting Goods
Enterprise Mfg. Co., Akron, O

Squares, Machinists'
Disston, Henry & Sons, Philadelphia, Pa
Duby & Shinn, Branchport Station, Long Branch, N. J
Stanley Rule & Level Co., New Britain, Ct

Stampings—Sheet Metal
Avery Stamping Co., Cleveland. O

Stoves and Ranges
Barler, A. C. Mfg. Co., Chicago, Ill
Beckwith, P. D. Estate, Dowagiac. Mich
Born Steel Range Co., Cleveland, O
Chicago Stove Works, Chicago
Clark, Geo. M. Co., Chicago, Ill
Cole Mfg. Co., Chicago, Ill
Germer Stove Co., Erie, Pa
Quality Stove & Range Co., Belleville, Ill
South Erie Iron Works, South Erie, Pa
Stove & Range. The Co. of Pittsburgh Pittsburgh, Pa
Willard, Wm. G., St. Louis, Mo

Stove Cement
Dixon, Jos. Crucible Co., Jersey City, N.J

Stove Clay
Bridgeport Crucible Co., Bridgeport, Ct

Stoves—Gas
Adler, H. Co., Carnegie, Pa
Standard Stove & Range Co., Pittsburg, Pa
Stove & Range, The Co. of Pittsburgh Pittsburgh, Pa

Stove Mats
Stuber & Kuck. Peoria, Ill

Stove Pipes
Edwards Mfg. Co., Cincinnati, O
Hemp & Co., St. Louis, Mo
Reeves Mfg. Co., Canal Dover, O
Wheeling Corrugat'g Co., Wheeling, W.Va

Stove Polish
A-B Stove Polish Co., Chicago
Black Silk Stove Polish Works, Sterling, Ill
Nickel Plate Stove Polish Co., Chicago

Stove Patterns
Cope Pattern, Geo. W. Wks., Detroit, Mich
Quincy Pattern Co., Quincy, Ill
Vedder Pattern Works, Troy, N.Y
Weller Pattern Co., Quincy

Stove Pipe Thimbles
Stuber & Kuck, Peoria. Ill

Stove Repairs
Brauer, A. G., St. Louis. Mo
Brucker, M., Chicago
Dust, Wm. T. Co., Detroit, Mich
Manufacturers' Stove Repair Co., Chicago

Stove Trimmings
Troy Nickel Works. Troy, N.Y

Sugar Kettles
Sperry, D. R. Co., Batavia, Ill

Tapes
Lufkin Rule Co., Saginaw, Mich

Test Tube Holders
U. S. Clothes Pin Co., Montpelier, Vt

Thermometers—Oven
Evans Stamping & Plating Co., Taunton, Mass

Tin—Perforated
Harrington & King Perforating Co., Chicago, Ill

Tinners' Tools
Lufkin Rule Co., Saginaw, Mich

Tinplate
Canton Art Metal Co., Canton, O
Eller Mfg. Co. Canton, O
Follansbee Bros. Co., Pittsburgh, Pa
Garry Iron & Steel Co., Cleveland, O
McClure Co., Philadelphia, Pa
Merchant & Evans Co., Philadelphia, Pa
Schoedinger, F. O., Columbus, O

Tinware Trimmings
Berger Bros. Co., Philadelphia

Tools, Etc.
North Bros. Mfg. Co., Philadelphia, Pa
Wiebush & Hilger, New York City

Tree Guards—Iron
Stewart Iron Works, Cincinnati, O

Trowels
Avery Stamping Co., Cleveland, O
Disston, H. & Sons, Philadelphia, Pa
Griffin Mfg. Co., Erie, Pa

Tubing—Brass and Copper
Hungerford, U. T., Brass & Copper Co., New York

Tubs and Pails
Wheeling Corrugat'g Co., Wheeling, W.Va

Vases—Iron Reservoir
Stewart Iron Works, Cincinnati, O

Ventilators
Canton Mfg. Co., Canton, O
Eller Mfg. Co., Canton, O
Friedley & Voshardt, Chicago, Ill
Globe Ventilator Co., Troy, N.Y
Merchant & Evans Co., Philadelphia, Pa
Powers Bros. Streator, Ill
Pullman Mfg. Co., Rochester, N. Y

Wash Boilers
Reed Mfg. Co., Newark, N. J.
Star Enameling & Stamping Co., Pittsburgh, Pa

Washing Machines
Benbow-Brammer Mfg. Co., St. Louis, Mo
Paxton & Gallagher Co., Omaha, Neb
Richmond Cedar Wks., Richmond, Va
Voss Bros. Mfg. Co., Davenport, Ia
Waverly Woodenware Works, St. Joseph, Mo

Water Motors
Divine Water Motor Co., New York

Wire Goods
Cyclone Fence Co., Waukegan, Ill
Denning Wire & Fence Co., Cedar Rapids, Ia
Pittsburgh Steel Co., Pittsburgh, Pa

Wants and Sales

For Yearly subscribers THE AMERICAN ARTISAN will insert under this head advertisements of six lines WITHOUT CHARGE for employers wishing to secure employes, persons seeking situations, parties desiring to purchase a business, businesses for sale, partners wanted, to exchange, etc. Those who respond to these announcements will please mention that they read the advertisement in THE AMERICAN ARTISAN.

BUSINESS CHANCES

PATENTS

HUBERT E. PECK, 623 F. St., N. W., Washington, D. C. Consulting Expert in Patent Causes. U. S. and Foreign Patents. Send for leaflet on "Rejected Patent Application."

Wanted—To buy second-hand office safe of good size soon as possible; also second-hand office desk. Address Kratz Bros. & Pelz, Mattoon, Wis. 17-3t

For Sale—Stock of general merchandise in small inland town; will invoice $9,000; will be reduced to $6,000 in next 90 days. Last year's sales $27,000. Good reason for selling. Address Holsinger & Co., Pyrmont, Ind. 16-3t

For Sale—Clean and complete stock of hardware and tools, doing good business; located in northern Iowa; too much other business reason for selling. Address A-81, care THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 16-3t

Business Chance.—To rent or sell, tinshop by Jan. 1, '07, well established trade; can give possession earlier if desired. Address Larson Hdw. Co., Sioux Falls, S. D. 16-3t

For Sale—Tin and plumbing business; bargain for the right man. Address B. B., care THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 15-3t

For Sale—Clean stock of hardware invoicing about $4,000 in one of the best cities in Michigan, which will increase 5,000 in population in the next two years; store well located on Main street. Address A. N. P., care THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 13-3t

For Sale—A nice clean stock of hardware with tin shop in connection, doing a good business in southern Wisconsin county seat, within a rich farming country. Only two hardware stores in the city; stock of $4,200. This will bear your investigation. Address Lock Box 52, care THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 19ufn

TINNERS' TOOLS.

For Sale—One 8 foot latest improved Keene cornice brake, only used six weeks; will sell at a bargain. Address Chas. Skidd, Kenosha, Wis. 16-1t

For Sale—One 30 in. square shears in good condition; only used one year; will cut 16 gauge metal and lighter. Address Chas. Skidd, Kenosha, Wis. 16-1t

For Sale—Cheap or exchange for others, lot of second-hand tinsmith's tools and machines in fair condition. For list and particulars address N. B. Case, Box 169, Havre de Grace, Md. 25ufn

HELP WANTED.

Help Wanted—One first-class A-1 store salesman for Minneapolis, St. Paul, and the northwest; only experienced man acquainted with the trade and able to sell goods need apply; good salary for right man. Address A-88, care THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 17-3t

Help Wanted—Strong young man who has had some experience in tin shop and wishes to finish trade; good opening for such a party to learn tinning, plumbing and heating trade. Address Grebe Hdw. & Harness Mfg. Co., Barrington, Ill. 17-2t

Help Wanted—Bookkeeper, male or female, with hardware experience; must live on South Side. Address A-87, care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 17-1t

Help Wanted—Young man as hardware clerk with some city experience in builders' hardware; man with good education and some knowledge of bookkeeping preferred. Address E. L. Sommers, 7105 So. Chicago Ave., Chicago, Ill. 17-2t

Help Wanted—Good all around tinner and furnace man; good wages, steady job for right man. Address Grebe Hdw. & Harness Mfg. Co., Barrington, Ill. 17-1t

Help Wanted—First-class iron pattern fitter as foreman in large eastern stove foundry; must know how to manage men, work in harmony with wood pattern shop and foundry, and able to follow up job until finished; state experience and wages wanted; strictly confidential. Address A-84, care THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 17-2t

Help Wanted—Tinner who understands steam and hot water heating, all kinds of furnace work; all around man; must be sober; good wages and steady job. Address A-83, care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 16-3t

Help Wanted—First-class tinner; one that understands plumbing and gas fitting; good wages; steady job the year around. Address Clayton Hdw. Co., Pittsfield, Ill. 16-3t

Help Wanted—Experienced tinner, man who understands brakes preferred; steady employment and good wages to right man; references required. Address D. C. Purdy, Highland Park, Ill. 16-3t

Help Wanted—At once, good tinner and plumber. Address S. E. McLaughlin, Manteno, Ill. 16-3t

Help Wanted—At once, first-class tinner to take charge of shop; must understand furnace and plumbing work; good place for right man; steady year around. Answer at once; state wages wanted; married man preferred; rent cheap; good town; no boozer need apply. Address Stover & Snyder, Three Oaks, Mich. 16-3t

Help Wanted—Tinners and helpers, men with experience at making wash boilers and pieced tinware; state age, salary wanted and where previously employed. Address Superintendent, Flat No. 3, 183 14th St., Milwaukee, Wis. 16-3t

Help Wanted—First-class tinner or cornice maker; steady work guaranteed; wages $3.50 to $4.00 per day; has-beens or would-be's need not apply. Address Chas. Skidd, Kenosha, Wis. 16-1t

Help Wanted—Good all around tinner, furnace and hot water man with some knowledge of plumbing; must be temperate; good job to the right man; population 1,200; good schools. Address Tyler & Hallas, Salem, S. D. 15-3t

Help Wanted—Hardware clerk, one who knows something about paint; steady employment in Chicago store; state age and experience. Address A-80, care THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 15-3t

Help Wanted—First-class tinner and plumber, work year around, will pay $3.00 per day to steady reliable man. Address N. D. McCutcheon & Co., Ltd., Idaho Falls, Idaho. 15-3t

Help Wanted—Good all around tinner and hardware clerk, good steady position for an industrious and sober man; must have good recommendations; state salary and full particulars in first letter. Address A-77, care THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 15-3t

Help Wanted—Good all around hardware and implement clerk, good position for a sober industrious man, not afraid of work; state salary and references in first letter. Address A-78, care THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 15-3t

Help Wanted—Tinner and all around man in country town; also handle furniture, man required to put this up and get in shape and work in store when not busy in shop; also put up stoves or any work that is desired of him. German preferred; state wages wanted; give references. Address A. S. Leffingwell & Co., Brighton, Colo. 15-3t

Help Wanted—Good all around tinner, one who will invest from $1,000 to $1,500 in an old established firm doing good business. Address J. H. Mitchell, Richmond, Ind. 15-3t

Help Wanted—First-class all around tinner that is competent to take full charge of shop; do all kinds sheet metal work, plumbing, furnace, steam and hot water heating. High grade work; must be A-1 man with correct habits; steady job, 9 hours, $24 a week; more if worth it. Address Box 68, Golden, Colo. 15-3t

Help Wanted—Good tinner and furnace man, steady job for the right man; wages $3.00 for nine hours. Address J. T. Crampton, Aurora, Ill. 15-3t

Help Wanted—By January 1, experienced furnace and boiler salesman for Illinois. Do not apply unless you have had road experience selling goods to the trade. Address Illinois, care THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 10ufn

Help Wanted—Two furnace and boiler salesmen for Indiana, Ohio, Pennsylvania and western New York. Will only consider men practical in the heating business and prefer such who have had road experience and are acquainted with the trade in this territory. Address D. C., care THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 10ufn

Help Wanted—Cornice makers; good wages and steady work to experienced men. Address J. M. R., care THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. ufn

Help Wanted—Power brake operator; good wages and steady work to experienced man. Address, stating experience and wages expected. J. M. R., care THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 9ufn

SITUATIONS WANTED.

Situation Wanted—As foreman to take charge of tin shop in the line of creamery supplies. Address A-85, care THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 17-3t

Situation Wanted—Position in hardware store as clerk and helper in tin shop if necessary; experienced hardware man; steady job; good references. Address A-86, care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 17-3t

Situation Wanted—By first-class tinner at in and outside work; also furnace and job work; state wages and particulars. Address C. A. No. 908, Bellefountaine St., Indianapolis, Ind. 16-3t

Situation Wanted—January 1st, by young man, age 32; twelve years' experience with hardware jobbers; five years on the road; at present representing one of the largest jobbers in the world. Good character and ability; never discharged. Competent to fill position as manager, buyer or representative. Address A-82, care THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 16-3t

SPECIAL NOTICES.

SALESMAN WANTED

Travelers acquainted with the stove trade in south-west territory. House one of the oldest, with a popular and complete trademark line. A liberal contract will be made with the right parties. Address "Texarkana," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 14-u.f.n.

FOR SALE

USED MACHINERY—One lot shears 3' to 8' in length, both hand and power. One lot light and heavy sheet iron rolls. Also lever punches and shears. BERTSCH & CO., Cambridge, Ind. 25-u. f. n.

WANTED

Side Line: Salesman calling on heating trade regularly, to sell registers—commission basis. State territory covered, and how often; can make confidential or secret arrangements with good men. Address, SALES MANAGER, 2488 W. 27th St., Cleveland, Ohio. 25-u. f. n.

BLACK Silk STOVE POLISH

Black SILK Stove Polish Does Not Dry out or Rust through the cans

Dealers may order in quantities. BLACK SILK STOVE POLISH will not dry up or get hard in can. Good until used. We have Black Silk Stove Polish that is Five years old; it is moist and good as the day it was made.

GOOD STOVE POLISH WILL NOT DRY OUT

BLACK SILK STOVE POLISH WORKS
Makers of one grade only, at STERLING, ILL., U. S. A.

WYNN'S

SPECIAL NOTICES.

WANTED

Tinsmith or furnace man with practical experience wanted for our customers in country towns. Good wages and steady work to the right man. Say if you have had plumbing experience. Write

MERRICK, ANDERSON & CO., Winnipeg, Can.
or THE LENNOX FURNACE CO.,
12-4t Marshalltown, Iowa.

TO EXCHANGE

Have a finely located, improved farm in Iowa and one in Illinois to exchange for stock of hardware or implements. Address "B-13," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 12-4t

MAN WANTED

Somewhere near Chicago to assist us in showing and selling properties. No experience necessary if willing to let us teach you the real estate business. Salary $60 a month to honest man, willing to devote part of his time to this business.

CO-OPERATIVE LAND CO.,
12-4t Ambrus Bldg., Minneapolis, Minn.

WANTED

Position as manager of sales or assistant mill manager of sheet or tin plate business. Have large acquaintance with buyers east and west. Address "B-19," care of THE AMERICAN ARTESAN, 69 Dearborn Street, Chicago. 14-2t

SALESMEN WANTED

Hustling salesmen to carry first-class line of stoves and ranges, on commission, as side line. Goods well and favorably known. We have fine proposition for a few high class men. State age, experience, territory, etc. Address "B-17," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 14

WANTED

Tinners, sheetmetal, cornice and skylight workers; open shop; good wages, minimum 35c per hour. Apply Metal Workers' Association, Builders' Exchange, Buffalo, N. Y.

EQUIPMENT WANTED

We are in the market for a complete equipment for Stove Foundry, including patterns, which must be modern. Also machinery for making Steel Ranges. Prefer second hand if in good condition. Write, furnishing cuts and lowest prices. BOX 52, Sheffield, Alabama. 14-2t.

WANTED

Metal ceiling solicitor for Chicago and suburbs. Must be thoroughly experienced and able to show results. Address "B-20" care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 14-2t

WANTED

A tinner. One who is a practical furnace man to locate in good live town in Alberta, Canada. A man with $1,000 to invest in the business, preferred. Address "B-18" care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 14-2t

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14-4t

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First-class stove salesman, for Indiana; also salesman for Iowa. Salary and commission. Line strictly first-class and well known. State age and experience. Address "B-16," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 14-3t

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Wide awake specialty men to sell several articles of merit in the roofing line—quick sellers — liberal commission. Address, "B-23," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 15-2t

WANTED

Salesman to sell steel furnaces to the trade. We are looking for an exceptional man, capable of taking full charge of a department. Address, "B-22," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 15-7t

WANTED

Two first-class stove salesmen. Good salary and permanent position to men that can get the business. Applicant give full information concerning past experience. BLAKESLEY-TUTTLE STOVE CO., Kansas City, Mo. 15-4t

WANTED

Salesman. We have a fine territory in Central States, and permanent position for a man who can sell a well-known and established furnace to the trade. Address "B-21" care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 15-7t

WANTED

An up-to-date practical man as Superintendent by a Steel Range Co., who also wishes to add manufacturing Gas Ranges. Must be competent in both, and in Sheet and Metal Pattern Work. State salary and full particulars, where last or at present employed with reference if any. All correspondence strictly confidential. Address EASTERN OHIO STEEL RANGE CO., Care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago. 15-3t

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Ticonderoga Flake Graphite reduces friction losses in cylinders, bearings, and at all friction points. Get free sample 18-C.
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¼ lb. each size

North Carolina,	$3.40	4 x 6	2¾ x 3¼
Wyoming,	2.90	2½ x 3	2 x 5

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¼ lb. each size

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		2 x 4	2½ x 3
Wyoming,	5.60	3 x 3	2½ x 5
		3 x 4	4 x 6

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¼ lb. each size

North Carolina,	$9.40	4 x 5	2¾ x 3¾
		2½ x 4½	2 x 4
Wyoming,	8.05	3 x 3	2¾ x 2¾
		2½ x 3	5 x 6
		2 x 3	2½ x 5
		2 x 4½	2¼ x 3¼

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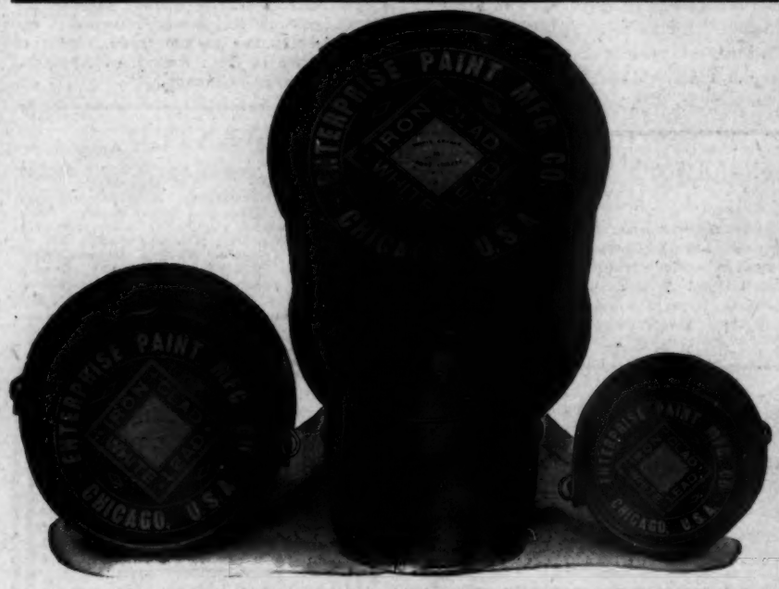

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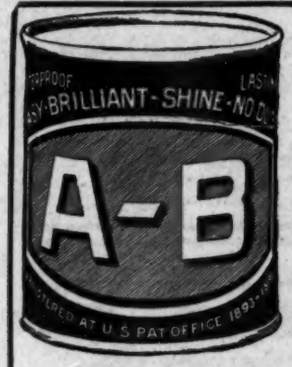

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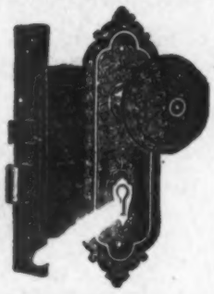

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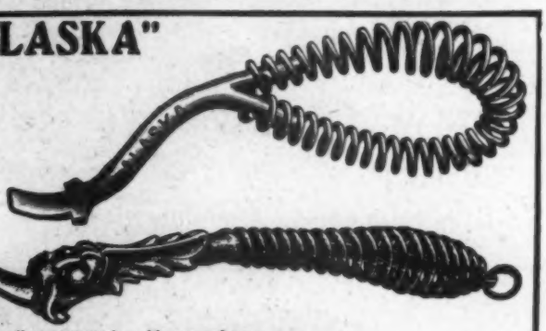

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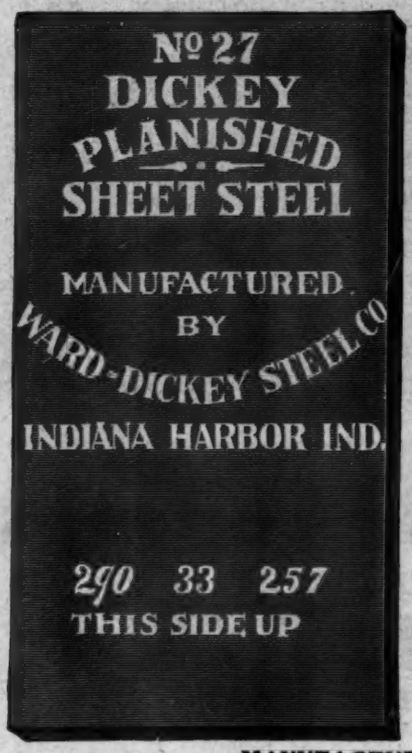

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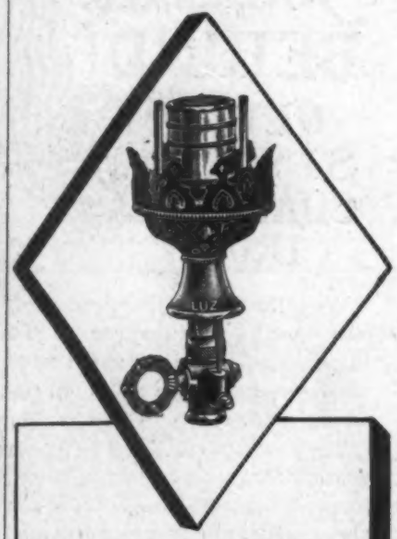

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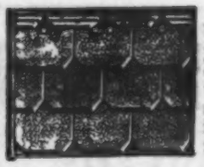
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2" per dozen	List ELBOWS	3.00	SHOES	3.60
3"	"	3.60		4 32
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75% on 2" 3" 4" SHOES (re-enforced with Dieckmann's Patented Bands.)
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Station B. **CINCINNATI, OHIO**

COSTS NO MORE THAN COMMON TROUGH

Beautifully Simple
Perfectly Practical

"EASY BEAD" EAVES TROUGH

An Uncommon Trough Value
At Common Trough Prices

"Easy Bead" Eaves Trough has a round, open bead **without** the troublesome right angle bend, and is **made** to fit together easily, quickly and tightly, on the ground or on the ladder. The material is full 28 gauge **"Apollo"** galvanized steel, instead of the lighter weights commonly used.

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One Piece Stove Pipe Elbows

A Dozen in a Strong Box Crate

STRONGEST HANDSOMEST BEST FITTING.

The only Elbow which will Permit of a High Polish.

Made in Five Grades:

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MADE ONLY BY

THE REEVES MANUFACTURING CO.

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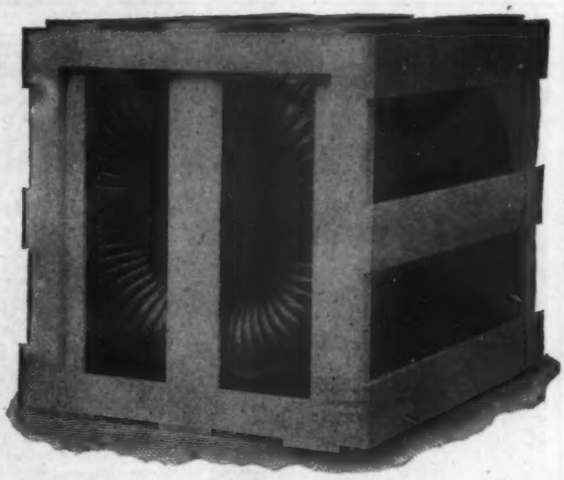

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Black and Galvanized Sheet Iron or Steel

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INSTANT SHIPMENTS

We Have Our Own
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Made of Galvanized Iron in Ten-Foot Lengths without a Cross Seam. Will not burst when full of ice.

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The great fuel saving properties of "J-M" High Pressure Steam Pipe Coverings are the result of the excellency of the materials used in their manufacture, in conjunction with the most approved methods of construction.

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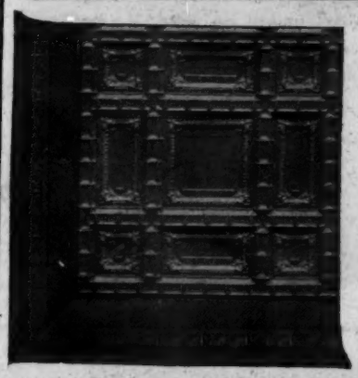

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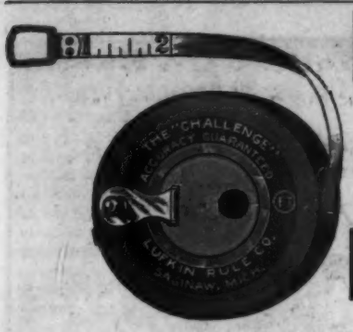

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The genuine Yale lock always has the trade mark

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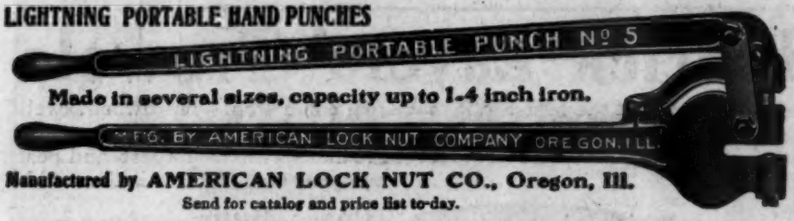

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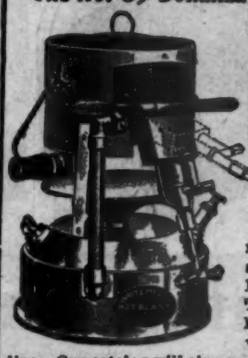

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FAMOUS FOR TEMPER AND CUT
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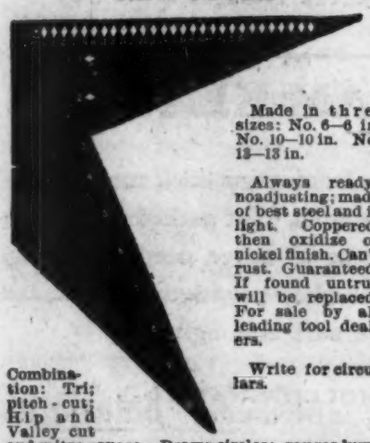

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Try Square No. 5—6-inch 8-inch and 10-inch. Note the Gauge edge.

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The different Level—with the bulb seen in all positions. Any mechanic will buy when he examines. Put in stock.
For sale by all the leading jobbers. Catalog on request.
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that will not scorch or burn even the most delicate dainty sauce or gravy. Will not absorb grease or flavor. Does not get smeary, dirty, unsanitary. Always clean, sweet, hygienic. Never warps.

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Absolutely New, Patent Applied For

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Made from very thick metal, without Stay Bolts, joint packed in such a manner as to never need repacking. A little higher priced than some, but they are safe and tight.

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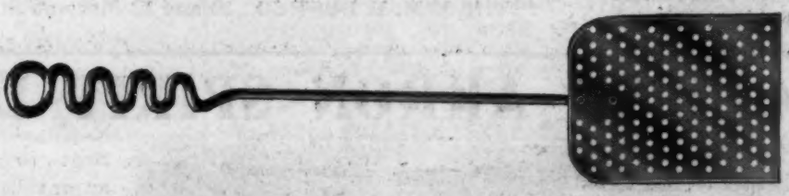

No. 50

The grease passes through it instantly and leaves the food light and tempting. Easily cleaned. Made entirely of steel. A firm, cool grip. Will last a life time. Costs no more than a poor one. Our catalog contains some 400 good things, and can be had for the asking. Risk a postal card on it anyway.

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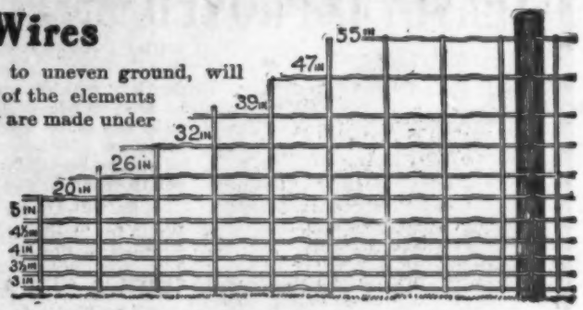
"Pittsburgh Perfect" Fences

All Galvanized Steel Wires



Are durable, strong and adjustable. They can be adjusted to uneven ground, will curb in the strongest beast and will withstand the attacks of the elements longer and surer than any other fence on the market. They are made under the same favorable conditions and as carefully as all the

"Pittsburgh Perfect" Brands

of Wire Rods, Annealed, Bright and Galvanized Smooth Wire, Barb Wire, Twisted Cable Wire, Fence Staples, Wire Nails, Steel Hoops, Bands and Cotton Ties. Dealers can sell goods readily which are MANUFACTURED BY

The Pittsburgh Steel Co., Pittsburgh, Pa.

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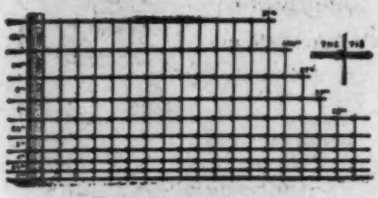

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is the one for you to handle

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Both Single and Double Strand.

JUMBO POULTRY turns everything.
Lighter Poultry for less money of Various Weights.

Lawn and Cemetery Fence, Barb Wire, etc.

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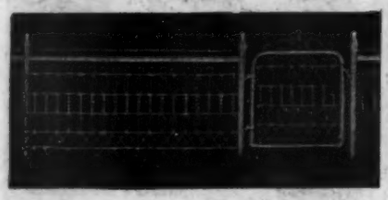

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We manufacture field fence, also wire gates.

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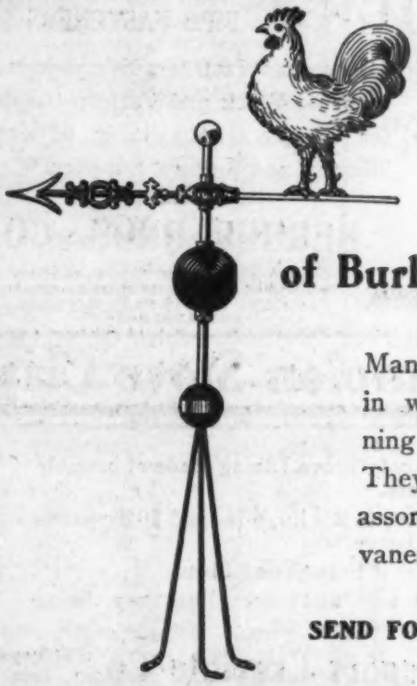

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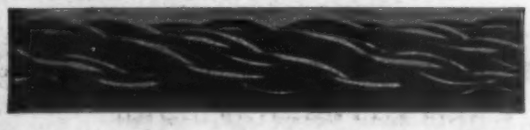

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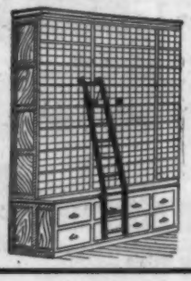

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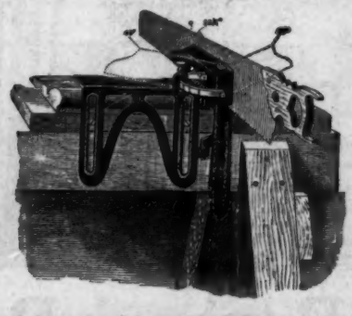

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Leading Hangers and Fasteners Everywhere. Immense Stock and Variety. Ask for Sample and Catalog of our Tinners' and Roofers' Supplies.

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Order it from your jobber.

The best and most refractory lining made.

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Rural Routes are going in all around you. You can get this business with the **SIGNAL MAIL BOX**

It is the original box for Rural Routes with special endorsements of Postmasters General. The best made, the best liked, the easiest sold and the best advertised.

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No Dust, No Dirt

Pleases everybody

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Order at once to insure prompt delivery.

Send for prices.

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Russia finish, pat. lock

STOVE PIPE.

It is made of a very high grade of uniform color Blue Polished Steel, and is coated to prevent rusting. Made in all sizes.

Packed twenty-five and fifty joints to crate. For sale by the jobbing Hardware Trade throughout the United States.

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NO HONING NO STROPPING

Fine, flexible, wafer steel that shaves 20 to 40 quick and comfortable shaves from each blade.

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Standard combination set with shaving brush and soap in triple silver-plated holders, - - - - - -	7.50
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Is the best and a Cheap Guard.

Get my prices, which are right.

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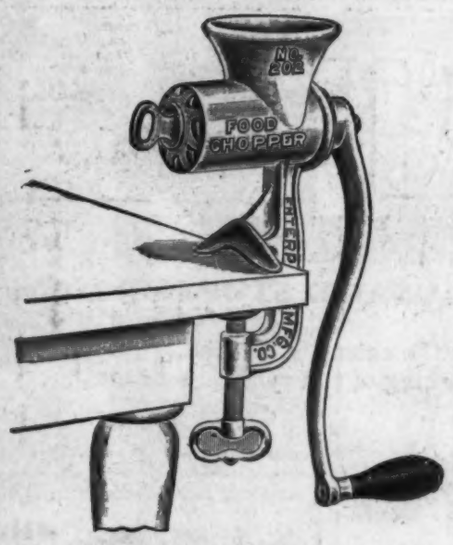
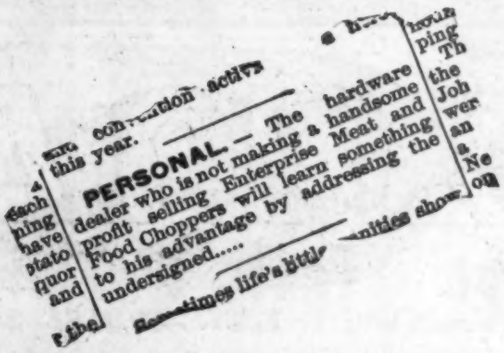




We are breaking all records in sales of Meat and Food Choppers. If you are not selling more

ENTERPRISE
Meat and Food Choppers

than ever before there is something wrong.

Write us for "ginger" (live advertising matter), to start business bubbling your way. People are afraid now of packing house products. They want to chop their own meats. They are buying Meat Choppers from the dealers who are pushing them. Get in line!

THE ENTERPRISE MFG. CO. OF PA. PHILADELPHIA, U. S. A.
NEW YORK BRANCH, 10 Warren St. SAN FRANCISCO BRANCH, 318 Market St.

H. A. Goold, Hiawatha, Kans., writes April 3, 1904: "You may discontinue my ad, as I have had so many answers that I was surprised. Your paper is well worth the subscription price, and I cannot see how any tinner wants to get along without it."

NOT
A Mail Order Proposition
But Sold
EXCLUSIVELY
to the
RETAIL MERCHANT

VOSS LINE OF WASHERS

OUR
One Dealer in a Town Agency
Will Interest You
WRITE TO-DAY
VOSS BROS. MFG. CO.
DAVENPORT, IOWA

HOTCHKISS CLIPPERS

Standard Quality and Workmanship Guaranteed. Prompt Shipment. Prices Right.

Simple in Design. Elegant in Finish.

No. 350 B. B.

Send for Descriptive Catalogue and Prices.
EDWARD S. HOTCHKISS,
IRANISTAN AVE., BRIDGEPORT, CONN.

U. S. CLOTHES PINS

never rust, smut, split, or blow off the line.
Any special clips made to order.

U. S. CLOTHES PIN COMPANY,
MONTPELIER, VT., U. S. A.

FACTORY LOCATIONS

For all kinds of plants using iron and steel and other metals. The country reached by the

SOUTHERN RAILWAY
AND
MOBILE & OHIO RAILROAD

is now growing at a rapid rate. This growth is steady, substantial and based upon the great natural resources. Give us your requirements for plant location and we shall be glad to send information. Write the nearest agent.

Small Foundry in good town for sale cheap. Refer to Washington File 24,657, Chicago File 16,209.

M. V. RICHARDS,
Land and Industrial Agent
Washington, D. C.

CHAS. S. CHASE, Agent,
624 Chemical Bldg., St. Louis, Mo.
Agent Land and Industrial Department.

Sausages made with the **ENTERPRISE SAUSAGE STUFFER** have no air inside the casing. For this reason they keep better.

The corrugated spout allows the air to escape as the casing is stuffed. Buyers appreciate this, and other good points—like the accurate boring of the cylinder—in the

ENTERPRISE

SAUSAGE STUFFER, LARD AND FRUIT PRESS

NOW is the time to push these goods for the fall trade.

Ask for electros for advertising, and advertising printed matter.

The Enterprise Mfg. Co.
OF PA.
Philadelphia, U. S. A.

New York Branch, 10 Warren St.
San Francisco Branch, 318 Market St.

We want one Hardware Merchant as exclusive Agent in each town in Nebraska, South Dakota, Northern Kansas and Western Iowa.

Paxton & Gallagher Co.
Omaha, Neb.

Think of Washers Think of Waverlys

Write for Agency.

WAVERLY WOODENWARE WORKS
St. Joseph, Mo.

The Fulton Hardware Co., Portland, Ind., write:

"Please discontinue our want ads for tinner and plumber, as we have received more replies than we can take care of at present."

The MAJESTIC WASHING MACHINE

Roller bearings. Large fly wheel. Lightest running Washer on the market. People are writing us daily to know where they can buy the Majestic. It is the quickest seller and commands the biggest profit to you of any Washing Machine made. That is why you should sell it. The tub of the **Majestic** is made of selected **Virginia White Cedar,** and will stand the action of water a life time. It is bound with our celebrated **Electric-Welded Wire Hoops,** is steam-tight and easy to operate. Two hundred thousand satisfied customers will testify to all we say.

We are shipping out 2500 Majestics each week. Write us for catalogue and prices.

Richmond Cedar Works
Manufacturers of Wooden Ware
Richmond, Virginia.

"PRE-EMINENTLY THE FINEST"

That's the unanimous opinion of our

SNOWEWHITE

The very latest in Washing Machines. Its essential features combine an

Easy Running Mechanism
Cover for Gearing
Extra Large Tub
Handsome Natural Wood Finish

Write for full description and prices. Both will be interesting.

BENBOW-BRAMMER MFG. CO.
ST. LOUIS, MO.

The Pioneer Washing Machine Manufacturers

THE

WHITE LILY

SELLS AND STAYS SOLD

There are more WHITE LILY WASHERS SOLD than of any other make of WASHING MACHINE.

DO YOU WANT A GOOD SELLER
Write Today

WHITE LILY WASHER CO., TOLEDO, OHIO DAVENPORT, IOWA

Eagle Mop Wringers and Ohio Detachable Mop Heads and Handles

Meet every service demanded of them. WHY?
Because they are built upon the correct principles. They have been hailed with delight by users, and the universal verdict is, I WANT NO OTHER. Ask your jobber or write us direct. A catalogue for the asking.

Eagle Cooperage Works, Sole Mfrs., Circleville, O.

Take up a **PRISCO** Bread Mixer and look it over carefully.

You'll notice many places where the **PRISCO** is way ahead of any other Bread Mixer on the market.

There's the Stirring Rod. In the **PRISCO** it stirs from the *bottom*,—it starts to mix from the bottom,—and that's why, with the **PRISCO**, you can mix better bread in 2½ minutes than in any other mixer in 3 minutes!

There's the Swivel Table Clamp. The **PRISCO** Clamp won't bore holes in your table,—wont stick or bind,—won't work loose. Can't say that of other Bread Mixer Clamps!

The **PRISCO** Pail is extra heavily coated with pure tin,—and then the pail is highly polished and burnished. To help the sale it is attractively labeled.

If you want to know more about the **PRISCO** Bread Mixer, send for a copy of our little Yellow Booklet,—the cleverest thing in Bread Mixer Advertising you've ever seen. We'll send you a copy,—and our special prices,—for the asking!

Ask to-day!

THE PRITCHARD-STRONG COMPANY,

Makers of PRISCO "Money-Back" Metalware.

CIRCLE ST., ROCHESTER, N. Y. **Chicago Office: Republic Bldg.**

Locations for Industries

ON

THE ERIE, THE COMMERCIAL RAILROAD

Chicago to New York

The Erie Railroad System's Industrial Department has all the territory traversed by the railroad districted in relation to resources, markets and advantages for manufacturing, can advise with manufacturers of specific products as to suitable locations, and furnish them with current information of a comprehensive nature dealing with the project in its full relation to manufacture and commerce.

The Erie is one of the greatest of trunk lines. Its own rails connect the two largest cities of America. Every section of the System has its particular merits. Profitable locations exist. It has great general and coal, oil and natural gas resources.

It is important in this age of modern facilities for manufacturers to locate where they can obtain side tracks so as to receive from and ship directly into cars at the factory. Information can be promptly furnished in this connection about every point on the system between New York and Chicago.

Manufacturers' inquiries as to locations are treated in strict confidence, and absolutely reliable information, so as to promote permanent traffic, is furnished. Address

LUIS JACKSON
Industrial Commissioner
Erie Railroad Company.
11 Broadway, New York.

Industrial Department

A COMMUNITY OF INTERESTS

Is that existing between the Atchison, Topeka & Santa Fe Railway System and the people on its lines. This partnership is evidenced in the creation of an Industrial Department by the Santa Fe, the objects of which are:

To ascertain and bring to the attention of interested manufacturers all the resources in the way of raw material along its lines;

To co-operate with and encourage the citizens of its territory in the establishment of industries which the local conditions, markets, and other factors favor;

To bring opportunities for investment in its tributary territory to the attention of investors;

To aid producers along it lines to extend their markets, and to foster an interchange of commodities along its system;

To encourage and aid in the introduction of new and profitable products;

To keep in touch with developments and discoveries in its immense mineral territory, and to aid miners and prospectors in bringing their claims to the attention of capital.

For further information address:

WESLEY MERRITT, Industrial Commissioner
1122 Railway Exchange, Chicago, Illinois

Some people pay out thousands of dollars a year for advertising. Do you think they are imprudent or reckless?

The LISK Sanitary

Self-Basting Enamel Roaster

Is the most wonderful cooking utensil and the best and most profitable seller ever placed upon the market.

¶ An extensive advertising campaign, embracing the use of all the best magazines read by over five million people, has awakened a wide public interest in the roaster.

¶ It is a guaranteed money-maker and labor saver.

¶ Seamless, sanitary, self-basting.

¶ It is manufactured in four sizes from Lisk's celebrated Imperial gray enamel steel ware and is unconditionally guaranteed.

¶ If you do not handle it, send for booklet and prices.

THE LISK MFG. CO., Ltd

Canandaigua, N. Y.

THANKSGIVING

IS THE

Savory Roaster Season

Be sure you have a good stock, then PUSH THEM. Keep SAVORY ROASTERS to the front for the next few weeks. They're profitable. They are GUARANTEED. You are giving your customers the best Roaster ever made. They are sure to be pleased with it.

GUARANTEE

Remember the Guarantee. That's one of the best selling points you have. The SAVORY ROASTER must give the woman absolute satisfaction, or she gets her money back. This point is what decides many a woman who is hesitating, and no woman, after using a SAVORY ROASTER, will return it. Make this guarantee the prominent feature in selling your SAVORY ROASTERS.

To help you sell them, we can supply you with:

Savory Roaster Advertising Pamphlets
Savory Roaster Dodger Slips
Savory Roaster Lithographed Show Cards
Savory Roaster Muslin Streamers, 6 Feet
Savory Roaster Electros

If you can use any of these, write us.

The

Republic Metalware Company

Buffalo Chicago New York

TRADE MARK DELTA

DELTA FILES

FILES OF QUALITY

FILES BEARING THE TRADE MARK

DELTA

ARE MANUFACTURED FROM THE BEST CRUCIBLE CAST STEEL BY COMPETENT AND EXPERIENCED FILE MAKERS

Value Received is the Most Potent Salesman—BUY DELTA FILES

You Eliminate All Chances When You Use DELTA FILES

TO KEEP UP THE SALES, KEEP UP THE QUALITY

Buy, Sell and Use DELTA FILES

An Independent Organization. Not Connected With Any Trust in Anv Form, Shape or Manner

TRADE MARK DELTA

DELTA FILE WORKS

PHILADELPHIA, PA.

FILES OF QUALITY

CARVER FILE COMPANY
Proprietors

OCT 29 1906

TRIUMPH

In Boiler-Making

Quality, Construction and Finish are the distinguishing features of

Reed's Monarch Hand-made Wash-Boiler

Four grades—1X, 2X, 3X, 4X, 5A tissue lined charcoal plate with 14, 16, 18 and 20-oz. full weight copper bottoms, full line tin bottom and metallic bottom boilers, also four grades all copper boilers.

Monarch boilers all wired with 5-16 hard market steel wire drop forged, which makes the boiler strong enough to withstand a pressure of 300 lbs. without deflecting 1-16 of an inch. *See Cut.*

Furnished with Reed's new, seamless pressed cover, with 1-inch rim; cover and rim made of one piece; patent cold stationary handle, riveted on top of cover. Fits like a glove—is strong and durable.

Catalogue and price list mailed free on application. A comparison of prices will warrant your patronage, as we are in a position to furnish the best boiler for the least money made in America.

Reed Manufacturing Co., Newark, N. Y.

Branch Offices: 225 West 12th Street, CHICAGO
55 Atlas Bank Bldg., CINCINNATI

DO YOU KNOW Pierce's Patent Commode Pail

COMMODE PAIL

is the only one having a latest improved closet seat which need not be removed when cleansing. Seat is on outside of body with braces riveted to side of pail. Made of galvanized iron painted and decorated in assorted colors or finished in white enamel. Packed one fourth dozen per crate.

Get a trial order from your jobber and we assure you, that you will buy none other. If you do not find them better than any made to-day, you may return them to us and we will pay your bill.

FOR SALE by the jobbing trade only.

PIERCE & LAUX

Manufacturers of Hardware Specialties Sell to Jobbers Only

BURLINGTON -:- -:- -:- IOWA

Quality Tells

When Henry Disston was asked the question: "WHAT DO YOU PUT IN YOUR SAWS?"
He replied: "GOOD STEEL AND HONEST WORK."

UPON THIS FOUNDATION IS BUILT

DISSTON QUALITY

If you want a saw it is best to get one with a name on it that has a reputation. A man who has made a reputation for his goods knows its value as well as its cost and will maintain it.

ESTABLISHED 1840 **HENRY DISSTON & SONS, Inc.** PHILADELPHIA PA.

STEVENS

We manufacture our goods RIGHT
We market our goods . . . . RIGHT
We protect the Trade . . . . RIGHT
We advertise our goods . . RIGHT

STEVENS ARMS ARE ALL RIGHT ARMS

Leading Jobbers handle our Firearms. Ask them for the Stevens. Send for 140-page illustrated Catalog.

J. STEVENS ARMS & TOOL CO.

460 Main Street Chicopee Falls, Mass., U. S. A.

Good Roofing Tin

Not the imaginary kind of goodness but the real thing that you can see and feel when you examine and work the tin. Samples and prices yours for the asking.

The McClure Co.
Pittsburgh Philadelphia

NOTICE!

We have exceptional facilities for handling American products: Hardware, Sanitary, Heating and Ventilating Goods. Branches in England and Continent. References furnished. Address
EXHIBIT & TRADING CO., Main Office, 72 Henry St., Liverpool, England

TRADE MARK SCOTT'S IC EXTRA COATED. REGISTERED

ROOFING TIN

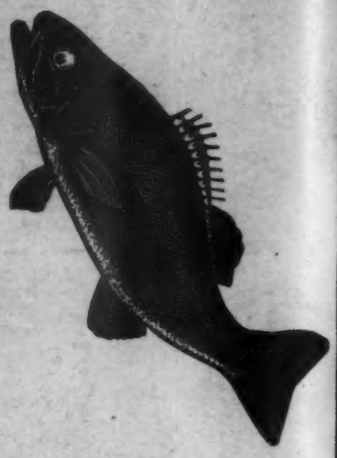
has GIVEN a good account of itself always for over 22 years. The sales are constantly increasing. We make it thoroughout and are particular to keep it up to standard at all times. No wonder it is in such demand among the trade and architects. Many large jobbers handle it. You can get prompt "close by" shipment.

Write Us.

This Plate is always good. Not good one time, bad another and indifferent the next. You can depend on it. YOU CAN BANK ON IT.

Follansbee Brothers Company
Pittsburgh
Makers

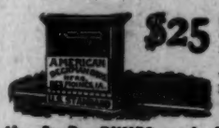
PFLUEGER'S Fishing Tackle



Hooks, Flies, Trolls, Spinners, Phantoms, Reels, Furnished Lines, Everything in Fishing Tackle.

NOTICE—Free to any Dealer in Sporting Goods. Sent Express Prepaid, 170-Page Illustrated Catalogue No. F25, and Metal Fish Sign in 8-Color Lithograph

The Enterprise Mfg. Co.,
AKRON, OHIO, U. S. A.



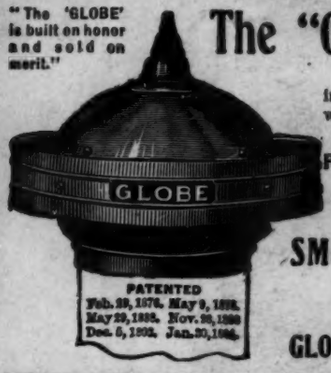
$25 ON 5 TON is what you can save. We make all kinds of scales. Write for prices.

Also R. R. PUMPS and WIND MILLS
Beckman Bros., Des Moines, Ia.

No dealer may call his stock complete without the

STAR EXPANSION BOLT COMPANY
147 Cedar Street, New York
142 Lake Street, Chicago

"The 'GLOBE' is built on honor and sold on merit."



The "GLOBE" Ventilator

in COPPER, GALVANIZED IRON and with Glass Tops for Skylight purposes.

For Perfectly Ventilating Schools, Churches, Halls, Mills, Factories and Audience Rooms of Every Character

SMOKY CHIMNEYS CURED
"GLOBE" Ventilated Ridges.
Send for Pamphlet.

Manufactured by
GLOBE VENTILATOR CO., Troy, N.Y.

DELTA FILES

TRADE MARK DELTA

DELTA FILE WORKS
CARVER File Company
PHILADELPHIA, PA.

FILES OF QUALITY

An independent organization not connected with the trust in any form, shape or manner.

The ECLIPSE Nested Stove Pipe Thimble

BEST ON THE MARKET
PATENT PENDING

Saves 80 per cent. of room.
Is stronger than a hand made riveted thimble.
Is always ready to hook together.
Is made so that the lug passes through two slots and then tied.
The lug is always on top; therefore the LUG is not an objection to the entering stove pipe.
It is always kept nice and clean in a box: therefore no unsightly, rusty looking thimbles to adorn the stores. Galvanized iron; 5, 6 and 7 inch.

STUBER & KUCK, Manufacturers of Pieced Tinware and all Styles Flour Sifters. Peoria, Ill.
Watch for our next advt.

Tinners Find Employment
By advertising and using
THE
Powers Automatic Chimney Tops

They make chimneys draw, give tinners employment making stocks and give the dealers profit.
Sold by Hardware Jobbers and Dealers.
Made only by
POWERS BROS.
Streator, Ill.
This cut free to dealers.

THE "CENTENNIAL"

RAIN-WATER CUT-OFF

The strongest, most durable and cheapest CUT-OFF on the market.
The only single cut off made to fit corrugated and plain pipe and which can be used without extra pipe or elbows. For sale by all leading jobbers.
Patent applied for.
Manufactured only by
COONEY & GEIGER
19 and 21 East South Street, Indianapolis, Ind.